# PRELIMINARY OFFICIAL STATEMENT DATED AUGUST 16, 2018

# **NEW MONEY ISSUE -BOOK-ENTRY ONLY**

Fitch Ratings, Inc.: AAA Moody's Investors Service, Inc.: Aaa S&P Global Ratings: AAA (See "RATINGS")

In the opinion of Hinckley, Allen & Snyder LLP, Bond Counsel, based upon an analysis of existing law and assuming, among other matters, compliance with certain covenants, interest on the Bonds is excluded from gross income for federal income tax purposes under the Internal Revenue Code of 1986. Interest on the Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income for taxable years beginning before January 1, 2018. Under existing law, interest on the Bonds and any profit made on the sale thereof are exempt from Massachusetts personal income taxes, and the Bonds are exempt from Massachusetts personal property taxes. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership of disposition of, or the accrual or receipt of interest on, the Bonds. See "TAX EXEMPTION" herein.



# \$162,385,000\* State Revolving Fund Bonds Series 21 (Green Bonds)

**Dated: Date of Delivery** 

Due: as shown on the inside cover hereof

The Massachusetts Clean Water Trust State Revolving Fund Bonds, Series 21 (Green Bonds) (the "Bonds") will be issued as registered bonds and, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company ("DTC"), New York, New York, which will act as securities depository for the Bonds. Individual purchases will be made in book-entry only form, in the principal amount of \$5,000 and integral multiples thereof. See Appendix G – "The Depository Trust Company." Interest on the Bonds shall be payable on February 1 and August 1 of each year commencing February 1, 2019.

The Trust will use the proceeds of the Bonds, together with other funds of the Trust, to finance or refinance costs of certain wastewater and drinking water projects for governmental units or other eligible borrowers and to pay costs of issuance of the Bonds. The Bonds are payable solely from the funds pledged therefor pursuant to the Master Trust Agreement, including without limitation, (i) Borrower Payments, (ii) Contract Assistance Payments made to the Trust by The Commonwealth of Massachusetts (the "Commonwealth"), (iii) all rights and interest of the Trust in and to all Loans and Financing Agreements therefor (other than rights to receive indemnification and reimbursement and the right to receive certain fees) and (iv) certain other funds held under the Master Trust Agreement, including the Equity Funds. For additional information regarding the security for the Bonds, see "THE MTA BONDS – Sources of Payment and Security for the MTA Bonds" and "THE BONDS" herein.

The Bonds will be subject to redemption as described herein.

THE BONDS ARE SPECIAL OBLIGATIONS OF THE TRUST AND ARE NOT SECURED BY A PLEDGE OF THE FULL FAITH AND CREDIT OF THE TRUST, WHICH HAS NO TAXING POWER. NEITHER THE COMMONWEALTH OF MASSACHUSETTS NOR ANY POLITICAL SUBDIVISION THEREOF SHALL BE OBLIGATED TO PAY THE BONDS, AND NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF IS PLEDGED TO THE PAYMENT OF THE BONDS.

The Bonds are offered subject to the approval of the legality of the Bonds by Hinckley, Allen & Snyder LLP, Boston, Massachusetts, Bond Counsel to the Trust. Certain legal matters will be passed upon for the Trust by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts, Program Counsel to the Trust and for the Underwriters by Locke Lord LLP, Boston, Massachusetts. It is expected that the Bonds will be available for delivery to DTC in New York, New York, or its custodial agent, on or about September 12, 2018.

Citigroup

BofA Merrill Lynch Drexel Hamilton J.P. Morgan

Fidelity Capital Markets Loop Capital Markets Ramirez & Co., Inc. Goldman, Sachs & Co. LLC RBC Capital Markets

August \_\_\_\_, 2018

<sup>\*</sup> Preliminary, subject to change.

\$162,385,000\* State Revolving Fund Bonds, Series 21 (Green Bonds)

Maturity* (August 1)	Principal <u>Amount</u> *	Interest <u>Rate</u>	<u>Yield</u>	CUSIP <sup>†</sup> <u>Number</u>
2019	\$ 5,885,000			
2020	6,125,000			
2021	6,320,000			
2022	6,530,000			
2023	6,745,000			
2024	6,970,000			
2025	7,205,000			
2026	7,450,000			
2027	7,710,000			
2028	7,980,000			
2029	7,960,000			
2030	8,235,000			
2031	8,535,000			
2032	8,840,000			
2033	9,155,000			
2034	9,420,000			
2035	9,765,000			
2036	10,130,000			
2037	10,515,000			
2038	10,910,000			

No dealer, broker, salesperson or other person has been authorized by the Massachusetts Clean Water Trust or the Underwriters of the Bonds to give any information or to make any representations, other than those contained in this Official Statement, and if given or made, such other information or representations must not be relied upon as having been authorized by either of the foregoing. This Official Statement does not constitute an offer to sell or a solicitation of any offer to buy, nor shall there be any sale of the Bonds offered hereby by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information set forth herein or included by reference herein has been furnished by the Trust and includes information obtained from other sources that are believed to be reliable, but is not guaranteed as to accuracy or completeness and is not to be construed as a representation by the Underwriters or, as to information from other sources, the Trust. The information and expressions of opinion herein or included by reference herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the Trust or the other matters described herein.

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

IN CONNECTION WITH THIS OFFERING OF THE BONDS, THE UNDERWRITERS MAY OVERALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

<sup>\*</sup> Preliminary, subject to change.

<sup>&</sup>lt;sup>†</sup> CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, managed on behalf of the American Bankers Association by S&P Global Market Intelligence. The CUSIP numbers are included solely for the convenience of owners of the Bonds and the Trust is not responsible for the selection or the correctness of the CUSIP numbers printed herein. CUSIP numbers assigned to securities may be changed during the term of such securities based on a number of factors, including, but not limited to, the refunding or defeasance of such securities or the use of secondary market financial products.

# TABLE OF CONTENTS

Page

Page

INTRODUCTORY STATEMENT1	ABSENCE OF LITIGATION16
State Revolving Funds	LEGAL INVESTMENTS17
The Trust's SRF Bond Financing Programs2	TAX EXEMPTION17
MASTER TRUST AGREEMENT PROGRAM3	UNDERWRITING18
THE MTA BONDS3	RATINGS19
Special Obligations	FINANCIAL ADVISOR19
Flow of Funds Under the Master Trust Agreement5	CERTAIN LEGAL MATTERS19
Additional Bonds7	OTHER AVAILABLE INFORMATION19
Refunding Bonds7	CONTINUING DISCLOSURE20
THE BONDS7	FURTHER INFORMATION21
Plan of Finance	APPENDIX A - DEFINITIONS OF CERTAIN TERMS
Designation of Green Bonds	APPENDIX B – GREEN BOND PROJECT DESCRIPTIONSB-1
Proceeds Management	APPENDIX C - SUMMARY OF CERTAIN DOCUMENTS
Terms of Payment and Redemption	Summary of Certain Provisions of the Master Trust Agreement
Cities and Towns	Agreements
Massachusetts Water Resources Authority	APPENDIX E - PROPOSED FORM OF OPINION OF BOND COUNSELE-1
THE TRUST14	APPENDIX F - SUMMARY OF CONTINUING DISCLOSURE
General 14	UNDERTAKINGSF-1
Organization	APPENDIX G - THE DEPOSITORY TRUST COMPANY

APPENDIX H - PRIOR BONDS AND PRIOR

COMPANY ...... G-1

RESOLUTIONS......H-1

# MASSACHUSETTS CLEAN WATER TRUST

# **BOARD OF TRUSTEES**

Deborah B. Goldberg, Chair Treasurer and Receiver-General of The Commonwealth of

Massachusetts

James A. MacDonald Designee of the Treasurer and Receiver-General

Michael J. Hefferna Secretary of the Executive Office for Administration and

Finance of The Commonwealth of Massachusetts

Maya Jonas-Silver Designee of the Secretary of the Executive Office for

Administration and Finance

Martin Suuberg Commissioner of the Department of Environmental

Protection of The Commonwealth of Massachusetts

Steven J. McCurdy Designee of the Commissioner of the Department of

**Environmental Protection** 

SENIOR MANAGEMENT

Susan E. Perez Executive Director

Nathaniel Keenan Deputy Director

My T. Tran Treasurer

Maya Jonas-Silver\* Director of Finance and Administration

Steven J. McCurdy Director of Program Development

**ADVISORS** 

Hinckley, Allen & Snyder LLP Bond Counsel

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. Program Counsel

PFM Financial Advisors LLC Financial Advisor

KPMG LLP Auditors

U.S. Bank National Association Master Trustee

<sup>\*</sup> Nominee; pending confirmation by the Board of Trustees of the Trust.

# **SUMMARY**

This Summary is provided for the convenience of potential investors and is expressly qualified by the entire Official Statement, which should be reviewed in its entirety by potential investors.

Issuer: Massachusetts Clean Water Trust (the "Trust").

Issue: \$162,385,000\* Massachusetts Clean Water Trust State Revolving Fund Bonds, Series 21

(Green Bonds) (the "Bonds").

Dated Date: Date of Issuance.

Interest Due: February 1 and August 1, commencing February 1, 2019.

Principal Due: As shown on the inside cover of this Official Statement.

Redemption: The Bonds are subject to redemption as described herein under "THE BONDS – Terms of

Payment and Redemption."

Authorization: The Trust is authorized to issue bonds under Chapter 29C of the General Laws of the

Commonwealth. The Bonds will be issued pursuant to the Master Trust Agreement

(hereafter defined).

Purpose: The Bonds are being issued to finance or refinance costs of certain wastewater and drinking

water projects for governmental units or other eligible borrowers and, together with other funds of the Trust, to pay costs of issuance of the Bonds. See "THE BONDS – Plan of

Finance."

Designation as The Trust has designated the Bonds as "Green Bonds" based on the intended use of the "Green Bonds": proceeds of the Bonds for the financing of projects that adhere to the federal Clean Water

proceeds of the Bonds for the financing of projects that adhere to the federal Clean Water Act and Safe Drinking Water Act, as determined by the Environmental Protection Agency ("EPA"). The Trust has covenanted to report annually on the use of the proceeds of the Bonds until such proceeds have been fully expended. For further discussion on the "Green Bond" designation, see "THE BONDS – Designation of Green Bonds" and see Appendix B –

"Green Bond Project Descriptions" for detailed project descriptions.

Program: The Trust administers the Commonwealth's State Revolving Fund ("SRF") programs, which

are authorized by federal legislation — the Water Quality Act of 1987 for the clean water SRF and the Safe Drinking Water Act of 1996 for the drinking water SRF — to provide financial assistance to Borrowers for wastewater projects and drinking water projects. The Trust's SRF programs were established to accept federal grants and required Commonwealth

matching funds. See "INTRODUCTORY STATEMENT."

Sources of Payment

and Security:

The Bonds are special obligations of the Trust, payable solely from the funds pledged therefor pursuant to the Master Trust Agreement, including without limitation, (i) Borrower Payments, (ii) Contract Assistance Payments, (iii) all rights and interest of the Trust in and to all Loans and Financing Agreements therefor (other than rights to receive indemnification and reimbursement and the right to receive certain administrative and origination fees), and (iv) certain other funds held under the Master Trust Agreement, including the Equity Funds. Certain of such amounts relate to Prior Loans and are available to the Master Trustee only after deposit and transfers of such amounts under the Prior Bond Resolutions. Neither the Commonwealth nor any political subdivision thereof shall be obligated to pay the Bonds, and neither the faith and credit nor the taxing power of the Commonwealth or any political

i

<sup>\*</sup> Preliminary, subject to change.

subdivision thereof is pledged to the payments of the Bonds. See "THE MTA BONDS – Sources of Payment and Security for the MTA Bonds" and "THE BONDS."

The Bonds have been rated "AAA" by Fitch Ratings, Inc., "Aaa" by Moody's Investors Credit Rating:

Services, Inc. and "AAA" by S&P Global Ratings. See "RATINGS."

Tax Matters: In the opinion of Hinckley, Allen & Snyder LLP, Bond Counsel, based upon an analysis of

> existing law and assuming, among other matters, compliance with certain covenants, interest on the Bonds is excluded from gross income for federal income tax purposes under the Internal Revenue Code of 1986. Interest on the Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income for taxable years beginning before January 1, 2018. Under existing law, interest on the Bonds and any profit made on the sale thereof are exempt from Massachusetts personal income taxes, and the Bonds are exempt from Massachusetts personal property taxes. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership of disposition of, or the accrual or receipt of interest

on, the Bonds. See "TAX EXEMPTION" herein.

Book-Entry Form: The Bonds will be registered in the name of Cede & Co. as nominee for The Depository Trust

Company ("DTC"), New York, New York, which will act as securities depository of the

Bonds. See Appendix G – "The Depository Trust Company."

Additional Questions regarding this Official Statement or requests for additional information concerning Information: the Trust should be directed to Susan E. Perez, Executive Director, Massachusetts Clean

Water Trust, One Center Plaza, Suite 430, Boston, Massachusetts 02108, (617) 367-9333.

# MASSACHUSETTS CLEAN WATER TRUST

# **OFFICIAL STATEMENT**

Relating to

\$162,385,000\* State Revolving Fund Bonds Series 21 (Green Bonds)

### INTRODUCTORY STATEMENT

This Official Statement (which includes the cover page and the Appendices hereto) is furnished by the Massachusetts Clean Water Trust (formerly known as the Massachusetts Water Pollution Abatement Trust, the "Trust") to provide information concerning the Trust's \$162,385,000\* State Revolving Fund Bonds, Series 21 (Green Bonds) (the "Bonds") together with information about the Trust's State Revolving Fund ("SRF") programs. Capitalized terms not otherwise defined in this Official Statement shall have the meanings set forth in Appendix A hereto.

The Trust is a public instrumentality of The Commonwealth of Massachusetts (the "Commonwealth"), created by Chapter 275 of the Acts of 1989, constituting, in part, Chapter 29C of the General Laws of the Commonwealth (collectively with other general and special laws of the Commonwealth amending or supplementing the foregoing, the "Act"). The Trust is issuing the Bonds to provide financial assistance to local governments and other eligible borrowers in the Commonwealth under its SRF programs described in more detail below. See "THE BONDS – Plan of Finance"

The Bonds will be the fifth series of MTA Bonds (defined below) and will be issued under and secured by the Master Trust Agreement dated as of January 1, 2015 (as previously supplemented and amended, the "Master Trust Agreement") and as further supplemented by the Fourth Supplemental Trust Agreement dated as of September 1, 2018 (the "Fourth Supplemental Agreement" and collectively with the Master Trust Agreement, the "Trust Agreement"). The Bonds together with any Additional Bonds and all bonds issued to date under the Trust Agreement are collectively referred to as "MTA Bonds." For a list of bonds and the principal amount outstanding under the Trust Agreement, see Appendix D - "SRF Bond Program – Bonds Outstanding and Borrowers." Additional MTA Bonds may be issued on either a parity ("Senior MTA Bonds") or subordinate ("Subordinate MTA Bonds") basis under the Trust Agreement. The Bonds will be, and all MTA Bonds issued to date have been, issued as Senior MTA Bonds. MTA Bonds are and will be payable and secured solely by the trust estate created under the Master Trust Agreement as more fully described herein.

The Trust previously administered its SRF Programs pursuant to its "Amended and Restated Resolution Authorizing and Establishing a Water Pollution Abatement and Drinking Water Project Financing Program" adopted on March 4, 1993, as amended and supplemented to date (the "Program Resolution"). The Trust issued several series of bonds (the "Prior Bonds") secured by certain funds held under the Program Resolution, including the Pool Program Reserve Fund and the Deficiency Fund, as well as funds held under the applicable bond resolutions (the "Prior Bonds Resolutions" and, together with the Program Resolution, the "Prior Resolutions"). See Appendix H – "Prior Bonds and Prior Resolutions" for additional information regarding the Prior Bonds and the security therefor.

With the establishment of the Master Trust Agreement in 2015, the Trust closed the lien of the Program Resolution. No additional bonds may be issued that are secured by the Program Resolution, except for refunding bonds with debt service requirements less than or equal to the debt service requirements on the refunded Prior Bonds in each fiscal year. Unless otherwise directed by the Trust, revenues released from the lien of the Program Resolution will be deposited into the Equity Funds established under the Master Trust Agreement and will be subject to the lien of the Trust Agreement.

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<sup>\*</sup> Preliminary, subject to change.

# **State Revolving Funds**

**Overview of Trust SRF Programs.** The Trust administers the Commonwealth's SRF programs, which are authorized by federal legislation — the Water Quality Act of 1987 for the clean water SRF and the Safe Drinking Water Act of 1996 for the drinking water SRF — to provide financial assistance to Borrowers for wastewater projects and drinking water projects. The Trust's SRF programs were established to accept federal grants and required Commonwealth matching funds in an amount equal to approximately 20% of the federal grants.

As described more fully herein, since 1993 and after the issuance of the Bonds, the Trust will have provided loans under its various SRF programs across the Commonwealth to approximately 300 Borrowers in an aggregate amount of in excess of \$7 billion. Borrowers under the Trust's SRF programs include local governments, public authorities and certain private entities throughout the Commonwealth, each of which is referred to as a "borrower."

**Revolving Nature of SRF Programs.** The SRF programs are called the State *Revolving* Fund programs because the federal grants and state matching funds and other moneys available to the Trust ("SRF Program Funds"), that are loaned to Borrowers or applied to secure bonds, are expected to be returned to the Trust to be used for its purposes in perpetuity. SRF Program Funds used to secure bonds issued pursuant to the Trust's SRF programs ("SRF Bonds") are expected to return to the clean water Equity Fund or drinking water Equity Fund, as applicable, to the extent not needed to cure or prevent a default on such SRF Bonds.

**Clean Water and Drinking Water SRFs.** The Trust initially allocates clean water SRF Program Funds and drinking water SRF Program Funds separately to secure its SRF Bonds issued for each purpose, and maintains separate accounts for those SRF Program Funds. The Trust may, however, use SRF Program Funds for one purpose to cure or prevent a default on SRF Bonds issued to fund the other purpose, subject to replenishment.

**Borrower Loans.** Each Loan to a Borrower by the Trust is in the form of either a loan or the purchase of the Borrower's bonds, in either case, pursuant to a financing agreement between the Trust and the Borrower. Both forms of assistance are referred to as a "loan." Pursuant to the financing agreements, each Borrower delivers its own general or special obligation bond to the Trust referred to as a "local bond," in order to secure its loan repayment obligations. The Trust makes loans under its clean water and drinking water SRF programs with terms up to thirty (30) years from project completion, but in no event does the Trust make a loan longer than the expected useful life of the project financed or refinanced by such loan.

### The Trust's SRF Bond Financing Programs

*MTA Bonds*. The Trust entered into the Master Trust Agreement to replace the Program Resolution and to create a simpler security framework for the Trust's SRF Bonds. The Series 18 Bonds were the initial series of MTA Bonds and the Trust expects to continue to conduct its SRF program through the Master Trust Agreement. The SRF Program financed under the Master Trust Agreement is hereinafter referenced as the "MTA Program."

*Prior Bonds.* The Prior Bonds were issued pursuant to the Program Resolution. The Prior Bonds were issued either to finance or refinance loans to several Borrowers concurrently ("Prior Pool Bonds") or to finance or refinance loans to a single Borrower ("Prior Single Obligor Bonds"). As of the date hereof, the Trust has Prior Pool Bonds outstanding under the clean water SRF and the drinking water SRF in the approximate principal amounts of \$1.3 billion and \$445.5 million, respectively. The Prior Single Obligor Bonds were issued to provide loans to the following three obligors: (1) the Massachusetts Water Resources Authority ("MWRA"); (2) the South Essex Sewerage District ("SESD"); and (3) the City of New Bedford. The Prior Single Obligor Bonds issued for the benefit of the MWRA are outstanding under the clean water SRF and the drinking water SRF in the approximate principal amounts of \$25.1 million and \$1.2 million, respectively. No other Prior Single Obligor Bonds are currently outstanding. The City of New Bedford, MWRA and SESD also are Borrowers under the Trust's Prior Pool Bonds and the MTA Bonds.

With the establishment of the Master Trust Agreement in 2015, the Trust amended the Program Resolution to provide that no additional bonds may be issued that are secured by the Program Resolution, other than refunding bonds with debt service requirements less than or equal to the debt service requirements on the refunded Prior Bonds in each fiscal year. The SRF programs secured by the Prior Resolutions are hereinafter collectively referenced as the "Prior Programs." See Appendix H – "Prior Bonds and Prior Resolutions" for more information regarding the Prior Bonds and the Prior Resolutions.

*Interim Loans.* In addition to issuing SRF Bonds, the Trust also uses its SRF Program Funds to provide Interim Loans to Borrowers on a temporary basis in anticipation of the issuance of SRF Bonds. As of the date hereof, the Trust has approximately \$549.2 million of Interim Loans outstanding, of which approximately \$303.1 million are expected to be refinanced upon delivery of the Bonds from a combination of Bond proceeds and SRF Program Funds.

# MASTER TRUST AGREEMENT PROGRAM

The Bonds will be the fifth Series of MTA Bonds. The Trust may issue both Senior MTA Bonds and Subordinate MTA Bonds under the Master Trust Agreement. The Bonds will be issued as Senior MTA Bonds.

Under the MTA Program, the Trust can issue bonds, or use moneys on deposit in the Equity Funds, to fund Loans to or purchase local governmental obligations from local governments and public authorities and certain private entities. Repayments on all Loans financed or refinanced through the MTA Program ("Borrower Payments"), together with Contract Assistance Payments and earnings on certain funds held under the Trust Agreement are expected to be used to pay debt service on the MTA Bonds.

Many of the Borrowers whose payments are pledged to pay debt service on the MTA Bonds have been borrowers under the Prior Programs. There have been no payment defaults by the Trust's borrowers that have required the use of other sources of funds to pay debt service on the Prior Bonds and there have been no payment defaults by the Trust's borrowers under the MTA Program.

### THE MTA BONDS

# **Special Obligations**

The MTA Bonds are special obligations of the Trust and do not constitute a pledge of its full faith and credit. The MTA Bonds are payable solely from the funds pledged therefor pursuant to the Master Trust Agreement and the applicable Supplemental Trust Agreement. The Trust has no taxing power. Neither the Commonwealth nor any political subdivision thereof is obligated to pay the MTA Bonds, and neither the faith and credit nor the taxing power of the Commonwealth or any political subdivision is pledged to the payment of the MTA Bonds. See "Sources of Payment – *Contract Assistance Payments*" below with respect to the Commonwealth's obligation to make Contract Assistance Payments.

# Sources of Payment and Security

Debt service on the MTA Bonds is expected to be paid from a combination of three sources:

- Borrower Payments. All payments due on each Loan, including any Contract Assistance Payments that are applied as a credit against the payment obligations of the Borrower under the related Financing Agreement, but not including any administrative fees or origination fees. Currently, each Borrower borrowing up to 20 years is obligated to repay the principal amount of its Loan at an interest rate of 2% or less, depending on the subsidy level to which such Loan is entitled. Certain Loans with terms greater than 20 years may bear interest at a rate in excess of 2%. Along with certain other Commonwealth agencies, the Trust has the right to intercept local aid payments made by the Commonwealth to a city or town if such city or town fails to make its payments under its Financing Agreement as described more fully herein. See "SECURITY FOR THE BORROWER OBLIGATIONS" for a description of the security and sources of payment for the local bonds issued by the Borrowers. "Borrower Payments" includes payments on account of certain loans which are held under, and subject to the lien of, the Prior Bond Resolutions or the Program Resolution (the "Prior Loans"), but only to the extent that such payments are transferred to the Master Trustee after any deposits or transfers required under the Prior Bond Resolutions. See Appendix A "Definitions of Certain Terms Borrower Payments" and Appendix C "Summary of Certain Provisions of the Master Trust Agreement Prior Bond Revenues."
- *Earnings*. All earnings received on investment of moneys in the funds and accounts held pursuant to the Master Trust Agreement and paid or to be paid into the Revenue Fund as set forth in the Trust Agreement.
- Contract Assistance Payments. Pursuant to the Act and the Amended and Restated Agreement for Contract Assistance dated as of June 1, 2018 (as amended from time to time) (the "Commonwealth"

Assistance Contract"), between the Trust and the Treasurer and Receiver-General of the Commonwealth (the "State Treasurer"), the Commonwealth makes payments to the Trust on behalf of certain Borrowers to provide for a portion of the debt service subsidy on Loans (the "Contract Assistance Payments").

The obligation of the Commonwealth under the Commonwealth Assistance Contract to provide assistance payments to the Trust constitutes a general obligation of the Commonwealth, for which its full faith and credit are pledged. The Commonwealth Assistance Contract is pledged under the Master Trust Agreement to the Master Trustee for the benefit of the holders of the MTA Bonds (subject to the prior pledge thereon under Program Resolution to the Program Trustee for the benefit of all holders of the Prior Bonds). The Contract Assistance Payments with respect to the Prior Bonds are pledged, upon receipt, under the prior bond resolutions for the benefit of the holders of the individual series of Prior Bonds. The Contract Assistance Payments with respect to the MTA Bonds are pledged, upon receipt, under the Master Trust Agreement for the benefit of the holders of the MTA Bonds. In addition, the Trust has covenanted in the Master Trust Agreement and in the Prior Resolutions to enforce the terms of the Commonwealth Assistance Contract as they pertain to SRF Bonds.

The Act limits the aggregate annual amount of Contract Assistance Payments that may be provided to loans funded by the Trust. At the date of this Official Statement, the maximum amount of Contract Assistance Payments that will be payable in any fiscal year with respect to all loans currently outstanding or for which the Trust has issued firm commitments (including Loans expected to be made in connection with the Bonds) does not exceed the applicable limits provided in the Act.

The MTA Bonds are also secured by a pledge of certain funds and accounts held under the Master Trust Agreement. All MTA Bonds are secured by the Revenue Fund and the Equity Funds. The Senior MTA Bonds are further secured by the Senior Debt Service Fund, Senior Debt Service Reserve Fund and the Senior Redemption Fund. The Trust has not funded the Senior Debt Service Reserve Fund in connection with any previous issuance of MTA Bonds and does not intend to fund the Senior Debt Service Reserve Fund in connection with the issuance of the Bonds. Subordinate MTA Bonds, if any, are secured by the Subordinate Debt Service Fund, the Subordinate Debt Service Reserve Fund and the Subordinate Redemption Fund. To the extent there are amounts in the Project Fund allocable to a particular Borrower, those amounts are available to cure Payment Defaults by such Borrower.

**Debt Service on Senior MTA Bonds.** In the event of a shortfall in amounts needed for debt service on Senior MTA Bonds, the Trustee shall promptly transfer the amount necessary to make up such deficiency, first, from the amounts on deposit in the Senior Redemption Fund, if any, second, from the Senior Debt Service Reserve Fund, if any, and third, from the applicable Equity Fund.

**Debt Service on Prior Bonds.** The Master Trust Agreement provides that, subject to the limitation set forth under the heading "– *Transfers Out of the Master Trust Agreement*" below, if there is a shortfall in amounts needed for scheduled principal (on maturity or scheduled sinking fund redemption) or interest on the Prior Bonds under the Prior Resolutions or for Scheduled Hedge Payments relating to Prior Bonds, in each case which is not otherwise cured as provided the applicable Prior Resolutions, the Trust shall direct the Master Trustee to transfer to the applicable Prior Bond trustee from the applicable Equity Fund, an amount necessary to cure such shortfall.

Transfers Out of the Master Trust Agreement. Any moneys held by the Master Trustee pursuant to the Master Trust Agreement may be transferred out of the funds, accounts and subaccounts of the Master Trust Agreement (including without limitation the Equity Funds) in accordance with the Master Trust Agreement or free and clear of the lien thereof, at the written direction of the Trust upon delivery to the Master Trustee of a written report setting forth that the removal of such moneys would not reduce the amount of Program Assets available in the then-current or any future fiscal year to less than 115% of Aggregate Debt Service in the then-current or any future fiscal year with respect to all MTA Bonds Outstanding and any other payments due under the Master Trust Agreement secured on a parity with the MTA Bonds.

**No Right of Acceleration.** The Owners, the Master Trustee, any Hedge Provider and any issuer of Credit Enhancement or Liquidity Facility shall not have any right to accelerate the payment of principal or interest due on any MTA Bonds Outstanding, Reimbursement Obligations or payments due under Parity Hedge Agreements.

# Flow of Funds Under the Master Trust Agreement

The Master Trust Agreement provides for the creation of the following funds and accounts (collectively, the "Funds and Accounts"): the Project Fund (including the Cost of Issuance Account), the Revenue Fund, the Senior Debt Service Fund, the Subordinate Debt Service Reserve Fund and Subordinate Debt Service Reserve Fund (each including Clean Water Accounts and Drinking Water Accounts), the Senior Redemption Fund, the Subordinate Redemption Fund, the Clean Water Equity Fund and the Drinking Water Equity Fund (each including Interim Loan Accounts), the Administrative Expense Fund, the Rebate Fund and the Contract Assistance Fund (including a Clean Water Account and a Drinking Water Account). See Appendix C – "Summary of Certain Provisions of the Master Trust Agreement" for more information about such Funds and Accounts.

### Revenue Fund.

The flow of funds described below applies only while no Subordinate MTA Bonds are Outstanding. Although the Trust has not yet issued any Subordinate MTA Bonds, it may do so in the future. For a description of the flow of funds applicable (including with respect to the Bonds) while Subordinate MTA Bonds are Outstanding, see Appendix C – "Summary of Certain Provisions of the Master Trust Agreement – Revenue Fund."

The Master Trustee shall hold all local bonds issued by Borrowers to secure Loans for the credit of the Revenue Fund established by the Master Trust Agreement. The Master Trustee shall deposit in the Revenue Fund all Program Revenues, including without limitation all Borrower Payments, Contract Assistance Payments with respect to Loans and earnings, if any, on certain funds held under the Master Trust Agreement as described therein.

The Trust has in the past and may again in the future issue MTA Bonds to refund Prior Bonds ("Refunded Prior Bonds"). In such event, excess Prior Bond Revenues, if any, are transferred on each interest payment date for such Refunded Prior Bonds to the Master Trustee for deposit in the Revenue Fund. Prior to any such transfer, Prior Bond Revenues are first applied to (1) the payment of Principal Installments (as defined in the applicable Prior Bond Resolutions) and interest due and unpaid or to become due on such date on the applicable Outstanding Prior Bonds, and satisfaction of all other applicable requirements of the applicable Prior Bond Resolution, and (2) transfers to other prior bond trustees on such dates as required by any applicable Refunding Prior Resolutions (including any transfers to the Program Trustee for deposit under the Program Resolution).

On or before each debt service payment date on the MTA Bonds, the Master Trustee shall withdraw from the Revenue Fund and transfer to the Senior Debt Service Fund, the amounts, if any, required so that the balance in such fund equals the sums of the interest and principal to become due on such debt service payment date on, and all Scheduled Hedge Payments due under any Parity Hedge Agreement and Reimbursement Obligations, due with respect to, the Senior MTA Bonds.

Following the deposit to the Senior Debt Service Fund, the Master Trustee shall transfer any balance remaining in the Revenue Fund: *first*, to the Rebate Fund if and to the extent required so that the amount therein equals the rebate requirement, second, to the Clean Water Account or Drinking Water Account, as applicable, in the Senior Debt Service Reserve Fund (as directed by the Trust), to the extent and in the amount of any draws on the applicable Account theretofore made as provided in the Master Trust Agreement due to a Payment Default, but only to the extent of Program Revenues received and deposited in the Revenue Fund in satisfaction of such Payment Default, third, to the Senior Redemption Fund, all or any portion of the remaining balance in the Revenue Fund and fourth, to the applicable Equity Fund, upon the order of the Trust, all or any portion of the remaining balance in the Revenue Fund as requested in writing by the Trust, but only upon receipt by the Master Trustee of a certificate of an Authorized Officer of the Trust to the effect that following such payment expected Program Revenues and other funds available for the purpose will be sufficient to pay in the current and each subsequent fiscal year Aggregate Debt Service when due and Scheduled Hedge Payments under Parity Hedge Agreements and Reimbursement Obligations and all required deposits, if any, into all Funds and Accounts established and maintained under the Master Trust Agreement. See Appendix C - "Summary of Certain Provisions of the Master Trust Agreement - Revenue Fund" for a description that includes a flow of funds that would apply (including with respect to the Bonds) while Subordinate MTA Bonds are Outstanding.

**Senior Debt Service Reserve Fund.** The Master Trustee shall promptly deposit in the Senior Debt Service Reserve Fund such amounts as set forth in a Supplemental Trust Agreement and any amounts transferred to the Senior

Debt Service Reserve Fund, as provided in the Master Trust Agreement in order to reimburse the Senior Debt Service Reserve Fund for transfers to the Senior Debt Service Fund to provide for payment of principal of and interest on the Senior MTA Bonds, a Scheduled Hedge Payment or Reimbursement Obligation. Upon receipt thereof, all earnings derived from the investment or deposit of moneys in the Senior Debt Service Reserve Fund shall be transferred by the Master Trustee to the Revenue Fund. If on any debt service payment date for any Senior MTA Bonds, after the transfer from the Revenue Fund described above, the amounts on deposit and available in the Senior Debt Service Fund and the Senior Redemption Fund are insufficient to pay debt service on the Senior MTA Bonds and any Scheduled Hedge Payment or Reimbursement Obligations then payable by the Trust with respect to Senior MTA Bonds, the Master Trustee shall promptly withdraw the amount of such deficiency from amounts on deposit in the Senior Debt Service Reserve Fund if the aggregate amount therein is less than such deficiency), as directed by the Trust, and shall deposit such amount in the Senior Debt Service Fund. The Trust has not funded the Senior Debt Service Reserve Fund in connection with any previous issuance of MTA Bonds and does not intend to fund the Senior Debt Service Reserve Fund for the Bonds.

Equity Funds. The Trustee shall deposit the following amounts in the Clean Water Equity Fund or Drinking Water Equity Fund, as applicable, upon receipt (except to the extent otherwise provided in the Master Trust Agreement or any Supplemental Trust Agreement): (1) all Federal Capitalization Grants and Commonwealth Matching Grants and amounts drawn thereon; (2) other amounts paid to the Trust (or to the Commonwealth and appropriated to the Trust) representing financial assistance provided pursuant to the Federal Acts for purposes of deposit in an SRF; (3) other amounts appropriated to the Trust by the Commonwealth for purposes of an SRF; (4) all amounts transferred to an Equity Fund from the applicable account in the Deficiency Fund held under the Program Resolution in accordance therewith; (5) amounts transferred from one Equity Fund to the other as permitted under the Master Trust Agreement; (6) all amounts paid to or for the account of a Borrower on account of interest on any Interim Loan made in anticipation of a Loan; and (7) any other amounts paid to the Master Trustee for deposit in an Equity Fund.

Subject to the uses permitted under this heading, funds, securities, investments and other property held from time to time in the Equity Funds are available for, and pledged to, the payment of debt service on the MTA Bonds when due and the payment of any other amounts required to be paid from time to time from the Funds and accounts held under the Master Trust Agreement. Notwithstanding the limitations set forth under the heading "— Transfers Out of the Master Trust Agreement" above and the previous sentence, the Master Trust Agreement provides that the Trust may from time to time pledge and grant a security interest in all or any of the assets of the Equity Funds to any other Person in connection with the programmatic uses permitted by the Act or the applicable Federal Act, which pledge may be on a parity with, or subordinate, to the pledge made under the Master Trust Agreement.

The available moneys in an Equity Fund may be used (i) to make Loans or Interim Loans, (ii) subject to certain limitations in the Master Trust Agreement, reimburse the Trust for Interim Loans or Loans pursuant to existing Financing Agreements funded from moneys or assets in the MTA Program, (iii) to make up deficiencies in any Fund under the Master Trust Agreement, or (iv) to make deposits and provide other subsidies and assistance in connection with the MTA Program and other programs of the Trust pursuant to applicable law, upon such terms as the Trust may determine, including deposits into the Senior Debt Service Reserve Fund or Subordinate Debt Service Reserve Fund, as set forth in an applicable Supplemental Trust Agreement.

Subject to the limitations set forth above under "— Transfers Out of the Master Trust Agreement" above, if there is a shortfall in amounts needed to pay principal of or interest on Prior Bonds under the applicable Prior Bond Resolution or Scheduled Hedge Payments due with respect to a series of Prior Bonds which is not otherwise cured as provided the applicable Prior Resolution, the Trust shall direct the Trustee to transfer to the applicable trustee from the applicable Equity Fund, an amount necessary cure such shortfall.

The Master Trust Agreement does not require the Trust to maintain any minimum balance in the Equity Funds and the Trust makes no covenant to any Bondowner or any other party that funds or other assets will be available in the Equity Funds in the event of a deficiency on any debt service payment date. See Appendix C – "Summary of Certain Provisions of the Master Trust Agreement – Clean Water Equity Fund" and "– Drinking Water Equity Fund."

# **Cross-Collateralization**

Notwithstanding anything in the Master Trust Agreement to the contrary, the Trust may deliver at any time to the Master Trustee a certificate of an Authorized Officer pursuant to which the Trust may direct the transfer of funds or the allocation of liabilities (i) within the Clean Water Equity Fund or a Clean Water Account of any Fund to

the Drinking Water Equity Fund or a Drinking Water Account of any Fund or (ii) within the Drinking Water Equity Fund or a Drinking Water Account of any Fund to the Clean Water Equity Fund or a Clean Water Account of any Fund. The only limitations on the transfer of funds shall be as set forth in the Act, the Clean Water Act and the Drinking Water Act. In addition, any moneys, funds, revenues or other assets in any funds, accounts or subaccounts created under the Master Trust Agreement may be used to pay Debt Service with respect to any MTA Bonds (except as limited by the Master Trust Agreement) in a manner consistent with the Act, the Clean Water Act and the Drinking Water Act.

### **Additional Bonds**

The Master Trust Agreement provides for the issuance of additional Senior MTA Bonds and additional Subordinate MTA Bonds. Prior to the issuance of any additional Senior MTA Bonds, the Trust must certify that (i) Borrower Payments received or to be received, (ii) earnings received or to be received on investment or deposit of moneys in the Funds and Accounts held pursuant to the Master Trust Agreement and paid or to be paid to the Revenue Fund, (iii) Contract Assistance Payments allocable to Loans, and (iv) to the extent not already included in (i), (ii) or (iii), Prior Bond Revenues (collectively, "Program Revenues") for the current and each subsequent fiscal year are not projected to be less than 105% of the Aggregate Debt Service on all Senior MTA Bonds outstanding and any obligations issued under the Trust Agreement on a parity therewith, including the proposed additional Senior MTA Bonds, for the then-current and each subsequent fiscal year. Prior to the issuance of any Subordinate MTA Bonds, the Trust must certify that the Program Revenues for the current and each subsequent fiscal year are not projected to be less than 100% of the aggregate debt service on all MTA Bonds outstanding, including the proposed additional Subordinate MTA Bonds, for the then-current and each subsequent fiscal year.

### **Refunding Bonds**

The Master Trust Agreement provides for the issuance of refunding bonds ("Refunding Bonds") to refund all or a part of the MTA Bonds or any Prior Bonds. Prior to the issuance of any Refunding Bonds to refund other MTA Bonds, the Trust must deliver a certificate setting forth the Aggregate Debt Service for each fiscal year in which MTA Bonds are or will be Outstanding (a) computed immediately prior to the delivery of such Refunding Bonds and (b) computed immediately after the delivery of such Refunding Bonds, and showing either that (x) the Aggregate Debt Service in each fiscal year in which MTA Bonds will be Outstanding as computed in (b) of this paragraph will not be greater than the Aggregate Debt Service in each such fiscal year as computed in (a) of this paragraph or (y) the maximum annual Aggregate Debt Service for all such fiscal years as computed in (b) of this paragraph will not be greater than the maximum annual Aggregate Debt Service for all such fiscal years as computed in (a) of this paragraph, provided that, in lieu of such certificate, the Trust may deliver either (A) a certificate satisfying the conditions for the issuance of Additional Senior Bonds (if the Refunding Bonds are to be issued as Additional Senior MTA Bonds), (B) a certificate satisfying the conditions for the issuance of Additional Subordinate MTA Bonds (if the Refunding Bonds are to be issued as Additional Subordinate MTA Bonds), or (C) confirmation that the issuance of such Refunding Bonds will not cause a rating agency that has assigned and then maintains a rating on any MTA Bonds at the request of the Trust to lower, suspend or otherwise adversely affect any underlying rating then maintained on any outstanding MTA Bonds, without regard to any credit enhancement; provided that if Refunding Bonds are being issued to refund Prior Bonds, Aggregate Debt Service for purposes of clause (a) above shall include debt service on the Prior Bonds.

### THE BONDS

#### Plan of Finance

The proceeds of the Bonds will be used, together with SRF Program Funds, to finance or refinance Loans to Borrowers and to pay costs of issuance of the Bonds. Approximately \$119.3 million and \$70.2 million of Bond proceeds will be used to fund Loans under the clean water SRF and drinking water SRF, respectively. These Loans have been identified in Appendix B - "Green Bond Project Descriptions" and will secure the MTA Bonds. In addition, approximately \$85.7 million and \$27.9 million of SRF Program Funds will be used to fund Loans under the clean water SRF and drinking water SRF, respectively. These Loans will also secure the MTA Bonds. See Appendix D - "SRF Bond Program – MTA Bonds Outstanding and Borrowers" for a list of Borrowers under the Trust's MTA Program.

The Trust anticipates expending all of the proceeds of the Bonds within three years of such delivery. If there are unexpended Bond proceeds left in the Project Fund upon completion of a project, the unexpended funds will be used to prepay a portion of the related Loan and applied to fund costs of other eligible projects for the applicable Borrower or costs of eligible projects for other Borrowers within such three year period. See Appendix C – "Summary of Certain Documents – Summary of Certain Provisions of the Master Trust Agreement – Application of Project Fund."

# Sources and Uses of Funds\*

It is anticipated that the proceeds of the Bonds, and the SRF Program Funds and Trust administrative funds to be allocated thereto, will be applied as follows (rounded to the nearest dollar):

### **Sources**

Total Uses <sup>(2)</sup>	\$304,212,248
Underwriters' Discount	476,305
Costs of Issuance	604,860
Series 21 Loans	\$303,131,084
Uses	
Total Sources <sup>(2)</sup>	\$304,212,248
Trust Administrative Funds	1,076,555
SRF Program Funds <sup>(1)</sup>	113,617,845
Original Issue Premium	27,132,849
Par Amount of the Bonds	\$162,385,000

<sup>(1)</sup> Amount of SRF Program Funds to be applied to make a portion of the Series 21 Loans.

The following table sets forth for each fiscal year for the Bonds: (i) the debt service due on all MTA Bonds, (ii) the Borrower Payments, (iii) Prior Bond Revenues, (iv) Contract Assistance Payments, (v) the sum of the Borrower Payments and Contract Assistance Payments ("Total Revenues")†, (vi) Total Revenues divided by the MTA Bond debt service, (vii) the amounts expected to be transferred to the Equity Funds from the Program Trustee and (viii) and the sum of Total Revenues and transfers to the Equity Funds divided by the MTA Bonds debt service.

<sup>(2)</sup> Totals may not add due to rounding.

<sup>\*</sup> Preliminary, subject to change.

<sup>†</sup> Revenues for Additional MTA Bonds may include earnings on amounts in the Debt Service Reserve Funds; the Debt Service Reserve Funds have not been funded in connection with any previous issuance of MTA Bonds and are not expected to be funded in connection with the issuance of the Bonds.

MTA Debt Service Coverage Table\*
MTA Revenues

Fiscal Year Ending June 30	Debt Service	Borrower Payments <sup>1</sup>	Contract Assistance + Payments	+	Transfers from Prior Bond Resolutions <sup>2</sup>	=	Total Revenues	Total Revenues / Debt Service <sup>3</sup>	Transfers to Equity Funds <sup>4</sup>	(Total Revenues + Transfers to Equity Funds) / Debt Service
2019	\$60,320,483	\$61,861,697	\$5,001,559		\$ 5,113,250		\$71,976,506	119%	\$89,023,873	267%
2020	70,717,825	75,576,899	6,389,656		5,113,250		87,079,806	123	86,090,078	245
2020	70,211,325	75,518,612	6,158,619		5,113,250		86,790,481	124	82,929,588	242
2022	94,834,900	75,546,063	5,947,669		33,388,250		114,881,981	121	76,487,359	202
2022	78,490,650	75,563,672	5,728,562		14,490,625		95,782,859	122	78,981,020	223
2023	76,805,975	75,632,965	5,510,627		13,267,500		94,411,092	123	73,918,092	219
2024	80,273,425	75,704,069	5,294,155		17,192,500		98,190,723	123	67,842,610	207
2026	76,291,050	74,237,042	5,066,874		13,708,625		93,012,541	122	64,636,577	207
2027	66,325,925	71,351,296	4,860,115		7,025,625		83,237,036	125	58,646,771	214
2028	65,625,175	71,345,413	4,630,934		6,860,000		82,836,347	126	52,967,619	207
2029	65,025,675	71,416,077	4,420,985		6,712,000		82,549,063	127	48,721,819	207
2029	64,013,925	71,164,655	4,190,527		6,478,000		81,833,182	128	41,557,082	193
2030	56,659,925	70,435,795	3,957,890		0,470,000		74,393,685	131	39,134,054	200
2031	55,714,425	70,017,020	3,744,037		_		73,761,057	132	28,048,957	183
2032	55,215,000	70,092,525	3,516,070		_		73,608,595	133	28,811,655	185
2034	54,720,625	69,970,600	3,304,826		_		73,275,426	134	17,657,768	166
2035	54,144,200	69,975,369	3,076,475		_		73,051,844	135	16,196,037	165
2036	41,923,025	54,711,612	2,601,581				57,313,193	137	13,985,298	170
2030	31,622,300	42,222,042	2,411,346				44,633,388	141	12,689,496	181
2038	19,877,275	26,754,477	1,691,499		_		28,445,976	143	9,926,531	193
2039	19,622,950	26,233,548	1,411,985		_		27,645,532	141	6,827,955	176
2040	8,323,700	16,238,686	1,269,251		_		17,507,938	210	3,354,212	251
2040	8,199,150	16,252,756	1,136,763		_		17,389,519	212	3,442,137	254
2042	8,076,500	16,267,222	1,002,418		_		17,269,641	214	2,315,054	242
2043	7,955,300	16,282,100	870,983		_		17,153,084	216	2,374,407	245
2044	7,830,050	16,297,396	736,985		_		17,034,380	218	-	218
2045	7,710,500	16,313,121	610,189		_		16,923,310	219	_	219
2046	4,620,900	12,505,388	402,670		_		12,908,058	279	_	279
2047	2,714,250	7,990,273	302,885		_		8,293,158	306	_	306
2048	2,711,230	4,655,129	96,616		_		4,751,745	-	_	-
2049	_	4,652,428	32,221		_		4,684,649	_	_	_
	\$1,313,866,408	\$1,502,785,946	\$ 95,376,972		\$ 134,462,875		\$1,732,625,793		\$1,006,566,051	

<sup>&</sup>lt;sup>1</sup> Excludes Borrower Payments related to Prior Loans.

<sup>&</sup>lt;sup>2</sup> Subordinate to the lien securing the applicable Prior Bonds under the Prior Bond Resolutions. See "THE MTA BONDS - Sources of Payment and Security."

<sup>&</sup>lt;sup>3</sup> Additional Senior MTA Bonds may be issued if the debt service coverage, including such additional Senior MTA Bonds, is at least 105% for each fiscal year.

<sup>&</sup>lt;sup>4</sup> Amounts expected to be transferred to the Equity Funds from the Program Trustee. See Appendix H - "Prior Bonds and Prior Resolutions."

<sup>\*</sup> Preliminary, subject to change. Includes anticipated debt service on the Bonds and anticipated payments relating to the Loans to be funded with the proceeds of the Bonds.

# **Designation of Green Bonds**

The Trust is issuing the Bonds as "Green Bonds" due to the projects' adherence to the standards of the federal Clean Water Act and the Safe Drinking Water Act. The purpose of labeling the Bonds as Green Bonds is to allow investors to invest directly in bonds that finance environmentally beneficial projects. Holders of Green Bonds do not assume any specific risk with respect to any of the funded projects.

#### **Use of Bond Proceeds**

The Bonds are issued to finance wastewater infrastructure and drinking water infrastructure projects throughout the Commonwealth to bring communities into compliance with the Clean Water Act and the Safe Drinking Water Act and to pay costs of issuance of the Bonds. The goals of these laws are to improve water quality, protect the environment and protect public health. Projects funded by the Bonds include, among others:

# The City of Quincy - Quincy Point Pump Station Renovation

The Quincy Point Pump Station was built in 1971 and renovated in 1985. The purpose of this project was to address aging infrastructure which included the replacement of three 100-horse power (HP) two-speed pumps with two new 125-HP pumps controlled by variable frequency drives (VFD). The new VFD pumps are more energy efficient than the two speed pumps they replaced. The station's channel grinder and wetwell mixing components were upgraded to reduce the accumulation of fats, oils and grease on the water surface. A new odor control unit utilizing granular activated carbon was added, as well as a new Supervisory Control and Data Acquisition system. An older underground fuel storage tank was removed, and a new standby generator was added in addition to significant Heating, ventilation, and air conditioning (HVAC) updates. Architectural, wiring and plumbing improvements greatly improved the overall efficiency of the station. New air release valves and corrosion control for the 20-inch ductile iron force main and heavy cleaning of linked sanitary sewers have improved the longevity of this vital facility.

# The City of Fall River - Phase 16 Water Main Improvements

The City entered the sixteenth year of its annual cast iron water main and lead service line replacement program. Phase 16 water main improvements included the rehabilitation or replacement of approximately 16,500 linear feet of cast iron water mains and 106 lead service lines. The goal was to eliminate potentially serious and preventable health threats such as lead contamination. This project also aimed to provide safe and reliable drinking water to residents.

A full list of projects expected to be funded with the proceeds of the Bonds can be found in Appendix B hereto.

# **Project Evaluation and Selection Process**

Applicants for Trust financing under the MTA Program are required to complete an application form that includes general recipient information, financial information, terms of the financial assistance required, and, if applicable, demographic and system information. The projects to be funded by the Trust are selected on an annual basis. Each year the Trust's state-level partner, the Department of Environmental Protection ("DEP"), selects projects to be financed and publishes the information on the Intended Use Plan ("IUP"). DEP engineers review detailed project specifications and rank the projects against criteria that measure the severity of the problem being addressed, the sensitivity of the environment affected by the problem, and the appropriateness of the proposed solution to the described problem. For more information regarding the project selection process, see the Final 2018 Clean Water IUP and Final 2018 Drinking Water **IUP** following https://www.mass.gov/state-revolving-fund-srf-loan-program. For additional information on the Trust's partnership with DEP, see "THE TRUST."

# **Proceeds Management**

The proceeds of the Bonds will be deposited into segregated Clean Water and Drinking Water accounts within the Project Fund. The accounts are individually tracked for each project internally at the Trust and the DEP offices. The accounts are invested using the Trust's Investment Policy, which allows for investment in highly rated municipal obligations, AA or higher, direct obligations of the U.S. government, or, federal agencies, and secure money market funds, including a Commonwealth combined investment fund, the Massachusetts Municipal Depository Trust (MMDT).

# **Post-Issuance Reporting**

The Trust will report on the net proceeds of its Green Bonds once a year in its Annual Report to EPA and will list the progress of the projects and the continued use of proceeds. The reporting on Green Bonds will be included in an appendix of the Trust's Annual Report. The Trust will report on the Bonds until all Bond proceeds have been fully expended. The report will be in substantially the same form as is presented in Appendix B hereto. The Massachusetts Clean Water Trust Annual Reports are available at the following address: <a href="https://www.mass.gov/guides/investor-resources-mcwt">https://www.mass.gov/guides/investor-resources-mcwt</a> and the Trust expects to post future Annual Reports at the same location.

# **Terms of Payment and Redemption**

The Bonds will be dated their date of delivery, will bear interest therefrom, payable on February 1 and August 1 of each year, commencing February 1, 2019. The Bonds will mature on August 1, in the years and in the principal amounts set forth on the inside cover page hereof. The Bonds are subject to redemption as described below. The principal of and interest on the Bonds will be payable at the corporate trust office of Master Trustee, or at the office designated for such payment by any successor Master Trustee.

As long as the Bonds are registered in book-entry only form, principal and interest will be payable solely to Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), as the sole registered owner of the Bonds. See Appendix G – "The Depository Trust Company – Book-Entry Only System" herein. If the Bonds are issued in certificated form, interest on the Bonds will be payable thereafter to the person appearing on the registration books of the Master Trustee as the registered owner thereof on the Record Date by check or draft mailed on the interest payment date to the registered owner or, following appropriate notice to the Master Trustee, by wire transfer on the interest payment date to any owner of at least \$1,000,000 in aggregate principal amount of the Bonds. The Supplemental Trust Agreement establishes the fifteenth day of the month preceding each interest payment date (or if such day is not a Business Day, the next preceding Business Day) as the Record Date for such interest payment date.

# Redemption of the Bonds\*

Optional Redemption of the Bonds. The Bonds maturing on or prior to August 1, 20\_ are not subject to redemption prior to maturity. The Bonds maturing after August 1, 20\_ are subject to redemption prior to maturity on and after August 1, 20\_ in whole or in part at any time, by lot, at a redemption price equal to the principal amount of such Bonds or portion thereof redeemed, plus accrued interest to the redemption date.

Selection of Bonds to be Redeemed. If less than all of the Bonds of a particular maturity are redeemed, and so long as the book-entry only system remains in effect for the Bonds, the Bonds of such maturity to be redeemed shall be selected by DTC in such manner as DTC shall determine. If the book-entry only system no longer remains in effect for the Bonds, selection for redemption of less than all of the Bonds will be made by the Master Trustee by lot as provided in the Master Trust Agreement.

Notice to Bondholders. Notice of redemption of any Bonds shall be mailed, not less than thirty (30) nor more than sixty (60) days prior to the date of redemption, to the registered owners of the Bonds, or portions thereof, so called, but the failure to so mail such notice or any defect therein with respect to any particular Bonds shall not affect the validity of such call for redemption of any Bonds with respect to which no such failure or defect has occurred. All Bonds called for redemption will cease to bear interest on the specified redemption date, provided funds sufficient for the redemption of such Bonds in accordance with the Master Trust Agreement are on deposit with the Master Trustee. If such moneys are not available on the redemption date, the Bonds or portions thereof will continue to bear interest until paid at the same rate they would have borne had they not been called for redemption. In the case of an optional redemption of any Bonds, such notice may provide that the redemption of such Bonds is subject to the satisfaction of certain conditions and if such conditions are not satisfied on the redemption date, the Bonds shall not be subject to redemption on the redemption date. So long as the book-entry only system is in effect, redemption notices shall be

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<sup>\*</sup> Preliminary, subject to change.

sent only to the Depository Trust Company or its nominee. See Appendix G – "The Depository Trust Company – *Book-Entry Only System.*"

### SECURITY FOR THE BORROWER OBLIGATIONS

Borrowers that receive Loans funded with proceeds of MTA Bonds or from SRF Program Funds may include local governmental units, including cities, towns, local and regional water and wastewater districts, municipal water and sewer commissions and the MWRA, and, in the case of the drinking water SRF program, may also include private, for-profit owners of public water systems and not-for-profit owners of community water systems.

### Cities and Towns

Pursuant to the Act, each Borrower that is a city or town is authorized to secure its Loan with a local bond that is either a general obligation of such city or town payable from any source, including but not limited to ad valorem taxes, or a revenue obligation secured by water or sewer revenues or other particular revenues of the municipality, or a combination thereof.

Local bonds that are general obligations constitute a pledge of the full faith and credit of the city or town. Payment is not limited to a particular fund or revenue source. Except for the local aid intercepts described under "Local Aid Intercept" and taxes on the increased value of certain property in designated development districts, which may be pledged for the payment of bonds issued to finance projects within such districts, neither the Trust nor other holders of general obligations of cities and towns have a statutory priority or security interest in any assets of the municipality, although the use of certain moneys may be restricted.

The principal source of tax revenue for Massachusetts cities and towns is the tax on real and personal property. Massachusetts law directs municipal tax assessors to include annually in the property tax levy for the next fiscal year "all debt and interest charges matured and maturing during the next fiscal year and not otherwise provided for and all amounts necessary to satisfy final judgments." The amount of the tax levy is limited by a statute known as Proposition 2½. However, the voters in each municipality may vote to exclude from the limitation any amounts required to pay debt service on specific bond issues.

The primary limitation on the amount of the tax levy is that the levy cannot exceed 2.5% of the full and fair cash value of the taxable property in the municipality. A secondary limitation is that the tax levy cannot exceed the maximum levy limit for the preceding fiscal year, as determined by the Commissioner of the Massachusetts Department of Revenue ("Commissioner of Revenue"), by more than 2.5%, subject to an exception for property added to the tax rolls and for certain substantial valuation increases other than as part of a general revaluation. This secondary or "growth" limitation on the tax levy may be exceeded in any year by a majority vote of the voters, but an increase in the growth limit under this procedure does not permit a tax levy in excess of the primary limitation. The applicable tax limits may also be reduced in any year by a majority vote of the voters. The Commissioner of Revenue may adjust any tax limit "to counterbalance the effects of extraordinary, non-recurring events which occurred during the base year."

Except for taxes on the increased value of certain property in designated development districts which may be pledged for the payment of debt service on bonds issued to finance projects in such districts, no provision is made under Massachusetts law for a lien on any portion of the tax levy to secure particular bonds or notes or bonds and notes generally (or judgments on bonds or notes) in priority to other claims. Provision is made, however, for borrowing to pay judgments rendered after the tax levy has been fixed. With the approval of the Commonwealth's Director of Accounts, judgments may also be paid from available funds without appropriation and included in the next tax levy unless other provision is made.

Massachusetts cities and towns are subject to suit on their general obligation bonds and notes, and courts of competent jurisdiction have power in appropriate proceedings to order payment of a judgment on the bonds or notes from lawfully available funds or, if necessary, to order the city or town to take lawful action to obtain the required money, including the raising of it in the next annual tax levy, within the Proposition  $2\frac{1}{2}$  limits.

# **Regional Sewer Districts**

Certain regional districts, which include two or more cities or towns, have been established by the Massachusetts legislature to provide wastewater services within the district. Local bonds of such districts are general obligations of the districts, which have no taxing power and which assess debt service and other costs upon the constituent cities and towns within the district in accordance with the laws under which the districts were organized and with contractual agreements among such cities and towns. The constituent municipalities' obligations to pay such district assessments are general obligations of the municipalities, generally subject to the limitations of Proposition  $2\frac{1}{2}$  described above.

#### Water Districts

Certain water districts have been established by the Legislature for the purpose of providing drinking water services to a designated area of a city or town, or to designated areas within more than one city or town. Such districts have taxing power within their specified service area, and also have the ability to charge water rates within such service area. They can impose taxes and set their rates and charges independently, and their rates and charges are not subject to regulation by any other governmental body. The local bonds of such districts are general obligations of the districts, generally subject to the limitations of Proposition  $2\frac{1}{2}$  described above.

# Municipal Water and Sewer Commissions and the Massachusetts Water Resources Authority

Loans funded by the Trust for municipal water and sewer commissions and for the MWRA are payable from retail or wholesale water and sewer revenues. Such commissions and the MWRA are public instrumentalities and political subdivisions of the Commonwealth which are responsible for the operation of the water and wastewater systems of a particular service area. They have no taxing power, but fund their operations through the collection of fees and charges and, in the case of the MWRA, by assessment upon its member cities, towns, districts and other service recipients. They set their rates, charges and assessments independently, and their rates, charges and assessments are not subject to regulation by any other governmental body. To finance improvements to their water and wastewater systems, such commissions and the MWRA issue revenue bonds secured by a lien on their revenues. The local bonds issued by the MWRA and certain of such commissions to the Trust are subordinated as to both lien and payment to the senior indebtedness issued by the MWRA or such commission, as applicable.

# **Private Water Systems**

Under the Drinking Water Act, private, for-profit owners of public water systems and not-for-profit owners of community water systems (as defined by the Drinking Water Act) may qualify for financial assistance from the Trust's drinking water SRF program.

# **Local Aid Intercept**

Upon a Borrower's default in payment on its Loan, the Trust is authorized by the Act to utilize a mechanism referred to as a "local aid intercept" to obtain state financial assistance that would otherwise be transferred by the State Treasurer to any local governmental unit to which such default is directly or indirectly attributable.

Pursuant to the Act, if a Borrower fails to make a timely payment of its debt service payments on its Loan, the Trust is authorized to certify to the State Treasurer the amount owing to the Trust by reason of such failure, and the State Treasurer shall promptly pay to the Trust such amount, without further appropriation, from any local aid distribution otherwise payable to such Borrower. If a Borrower is an agency, commission or instrumentality of a city or town, the State Treasurer shall pay the local aid intercept to the Trust from amounts otherwise payable to such city or town as local aid distributions. Borrowers that are water districts or owners of private water systems generally receive little or no state financial assistance. Therefore, the value of the local aid intercept to the Trust is minimal or non-existent in the case of such borrowers.

If a governmental service recipient of a regional local governmental unit fails to pay when due any charges of the regional entity required for the regional entity to meet its debt service payments to the Trust, the Act authorizes the regional entity to certify to the State Treasurer the amount owing to such regional entity by reason of such failure, and the State Treasurer shall promptly pay to the regional entity such amount, without further appropriation, from any

local aid distribution otherwise payable to such city or town or other service recipient. If the Trust determines that a regional entity's failure to make a timely payment on its debt service payments on its loan is due to the failure by a city or town or other service recipient of such regional entity to pay an assessment or charge to the regional entity and that the regional entity has failed or refused to use the local aid intercept pursuant to the Act or any similar provision of law, then the Trust is authorized by the Act to certify to the State Treasurer the amount owing to the regional entity by reason of such failure, and the State Treasurer shall promptly pay to the Trust such amount, without further appropriation from any local aid payment otherwise payable to such city or town or service recipient. Any dispute regarding the amount of such local aid payments of cities, towns or other service recipients of a regional entity that are intercepted and paid by the State Treasurer to the Trust is subject to arbitration by an appeals board established by the Act.

Massachusetts law provides for other local aid intercepts under the Massachusetts Qualified Bond Act and for amounts due to the Commonwealth from a city or town for certain assessments, including assessments to the Massachusetts Bay Transportation Authority, the MWRA and the Massachusetts School Building Authority. Under the Qualified Bond Act, local debt service is paid directly by the Commonwealth, which then reimburses itself from otherwise distributable local aid. The Qualified Bond Act also contains a legislative covenant with bondholders that the act itself will not be modified to divert local aid to other purposes. The effect of this covenant, which was enacted in 1980, on the local aid intercept provisions in the Act, which was enacted in 1989, is uncertain, but it may be construed to grant a priority to holders of bonds issued under the Qualified Bond Act. With respect to the local aid intercepts that are triggered by a local default, Massachusetts law does not establish a priority of payment in the event of two or more defaults by a city or town which subject such city or town to such remedy.

#### THE TRUST

### General

The Trust was created in 1989 by the Act. The Trust is a public instrumentality of the Commonwealth, and is responsible for administering the clean water SRF and the drinking water SRF established under the Act to provide financial assistance to borrowers for wastewater projects and drinking water projects, respectively.

Title VI of the federal Clean Water Act, as amended by the federal Water Quality Act of 1987 (as amended from time to time, the "Clean Water Act") provides for the establishment of state revolving fund programs to provide financial assistance to borrowers in connection with the construction of publicly owned systems for the storage, treatment, recycling and reclamation of municipal sewage. The amendments to the federal Safe Drinking Water Act adopted in 1996 (as amended from time to time, the "Drinking Water Act") provide for the establishment of state revolving fund programs to provide financial assistance to borrowers, including for-profit companies and not-for-profit community water systems, for expenditures which will facilitate compliance with national drinking water regulations or otherwise advance the health protection objectives of the Drinking Water Act.

Pursuant to the clean water SRF, the Trust provides financing to Borrowers to fund costs of wastewater projects, including loans to fund community septic management programs, which are eligible for funding pursuant to the Clean Water Act. Pursuant to the drinking water SRF, the Trust funds the costs of drinking water projects which are eligible for funding pursuant to the Drinking Water Act.

# Organization

The Trust is governed by a three-member Board of Trustees, serving ex officio, consisting of the State Treasurer, whom the Act also designates as the Chair of the Board of Trustees, the Secretary of the Executive Office for Administration and Finance and the Commissioner of the Department of Environmental Protection ("DEP"). The Trustees and their respective offices are as follows:

Trustee	<u>Office</u>
Deborah B. Goldberg, Chair	Treasurer and Receiver-General of the Commonwealth
Michael J. Heffernan, Vice Chair	Secretary of the Executive Office for Administration and Finance of the Commonwealth
Martin Suuberg, Trustee	Commissioner of the Department of Environmental Protection of the Commonwealth

The Act authorizes each Trustee to appoint a designee to serve in the absence of such Trustee. The current designee of the State Treasurer is James A. MacDonald, First Deputy Treasurer, the current designee of the Secretary of Administration and Finance is Maya Jonas-Silver, Director of Capital Planning and Long-Term Obligations of the Commonwealth, and the current designee of the Commissioner of DEP is Steven J. McCurdy, Director, Division of Municipal Services for the DEP.

The Board of Trustees of the Trust has adopted by-laws, dated August 2, 1990 and amended through June 29, 2015 (the "By-Laws"), to govern the Trust. The By-Laws establish eight officer positions, a Chair, a Vice-Chair, an Executive Director, a Deputy Director, a Treasurer, a Director of Finance and Administration, and a Director of Program Development. The current officers of the Trust are as follows:

<u>Officer</u>	Trust Office
Deborah B. Goldberg	Chair*
Michael J. Heffernan	Vice-Chair*
Susan E. Perez	Executive Director
Nathaniel Keenan	Deputy Director
My T. Tran	Treasurer
Maya Jonas-Silver <sup>†</sup>	Director of Finance and Administration*

Steven J. McCurdy Director of Program Development\*

Pursuant to the By-Laws, the Executive Director, the Director of Finance and Administration and the Director of Program Development constitute the Executive Committee of the Trust. The Executive Director is the Chair of the Executive Committee.

The Executive Director is the chief executive officer of the Trust and is responsible for supervising the administrative affairs and general management and operations of the Trust. The Deputy Director assists the Executive Director in supervising the administrative affairs and general management and operations of the Trust. The Treasurer is responsible, under the supervision of the Executive Director and the Deputy Director, for financial transactions relating to the Trust, including care and custody of all funds and securities of the Trust, and for keeping accurate records of all matters with respect to bonds issued by the Trust.

The Director of Finance and Administration is responsible for supervising all financial matters relating to the Trust, and for acting as liaison to the Executive Office for Administration and Finance. The Director of Program Development is responsible for supervising the development and implementation of the Trust's financing programs as contemplated by the Act, for coordinating project approvals with DEP and for acting as liaison with the federal EPA, DEP and the Executive Office of Energy and Environmental Affairs of the Commonwealth.

# **Application and Compliance Process**

DEP has promulgated regulations which set forth its regulatory and supervisory powers associated with its approval of projects eligible for assistance from the Trust's SRF programs. DEP determines which projects on its

Each of these officers, in addition to their responsibilities to the Trust, has other responsibilities within their respective executive departments.

<sup>†</sup> Nominee; pending confirmation by the Board of Trustees of the Trust.

annual priority list are eligible for funding under the Trust's SRF programs and includes such projects in the Intended Use Plans, which are filed with EPA as part of the Trust's application for federal grants for its SRF programs.

DEP reviews each borrower's application, which includes plans and specifications for the project, evidence of the authorization of sufficient funds to finance the project and information on the borrower's financial capability. Upon approval of the application and project, DEP certifies to the Trust those costs of the project eligible for funding from the SRF program. Once a project is approved for financing by the Trust under the applicable SRF program, DEP and the borrower enter into a project regulatory agreement which includes a disbursement schedule, procedures for approval and payment of requisitions and a set of conditions related to the borrower's compliance with DEP regulations and other federal and state statutes and regulations applicable to the construction and operation of the project. DEP also conducts site inspections and other related oversight activities to ensure that the project has been constructed in accordance with plans and specifications previously approved by DEP.

# **Method of Funding**

The Trust, DEP and EPA have entered into a Revolving Fund Operating Agreement for each of the clean water SRF and the drinking water SRF which sets forth rules, procedures and activities to be followed by EPA and the Trust in administering the related federal grants and SRF program. To date, the Trust has been awarded a total of approximately \$1.5 billion in federal grants and approximately \$275.6 million in Commonwealth matching funds under the clean water SRF program. The Trust has also received a total of approximately \$525.8 million in federal grants, which includes approximately \$117.7 million in federally mandated set-asides for technical assistance and other matters, and approximately \$94.7 million in Commonwealth matching funds under the drinking water SRF program. In addition, the Commonwealth appropriated an additional \$30 million which was used to provide funds or secure financing solely for funding a community septic management program.

Federal grants are received by the Trust pursuant to the applicable Revolving Fund Operating Agreement and EPA Assistance Agreements between the Trust and EPA. Commonwealth matching funds are received by the Trust pursuant to the Amended and Restated Master Funding Agreement dated as of December 3, 2014, entered into by the Trust, DEP, the State Treasurer and the Commonwealth's Secretary of Administration and Finance. Cash draws on Commonwealth matching funds are made by a written request submitted by the Trust to the State Treasurer. No additional appropriation is required for draws under either the federal grants or Commonwealth matching funds.

The periodic cash draws by the Trust on the federal grants are based on the amount of incurred costs for certain eligible projects or activities.

The funding by the Trust of the loans being made in connection with the issuance of the Bonds is not dependent on the receipt of any future federal or state grants.

### **ABSENCE OF LITIGATION**

There is not now pending against the Trust any litigation restraining or enjoining the issuance or delivery of the Bonds or questioning or affecting the validity of the Bonds or the proceedings and authority under which the Bonds are to be issued, or the pledge or application of any moneys or the security provided for the payment of the Bonds, or the existence or powers of the Trust or restraining or enjoining the execution, delivery or performance of the Bonds, the Master Trust Agreement, the Supplemental Trust Agreement, the Financing Agreements or the proceedings under which they were issued or authorized or questioning or affecting the validity of any such agreements.

There is not now pending against the Commonwealth any litigation restraining or enjoining the execution, delivery or performance of the Commonwealth Assistance Contract or the Master Funding Agreement, or questioning or affecting the validity of such agreements.

In connection with the issuance of the local bonds to the Trust, each Borrower has certified or will certify that there was not or is not then pending against such Borrower any litigation restraining or enjoining the undertaking or issuance or delivery of the local bonds or the proceedings and authority under which such local bonds are to be undertaken or issued, as applicable, or the pledge or application of any moneys or the security provided for the payment of such local bonds, or the existence or powers of such Borrower, or restraining or enjoining the execution, delivery or performance of such local bonds or the proceedings under which they were issued or authorized.

# LEGAL INVESTMENTS

Under the provisions of the Act, the MTA Bonds are securities in which public officers and agencies, insurance companies, financial institutions, investment companies, executors, administrators, trustees and others may properly invest funds including capital in their control. The MTA Bonds, under the Act, are securities which may be deposited with any public officer or any agency for any purpose for which the deposit of MTA Bonds is authorized by law. Certain of such investors may be subject to separate restrictions which limit or prevent their investment in the MTA Bonds.

### TAX EXEMPTION

In the opinion of Hinckley Allen & Snyder LLP, Bond Counsel to the Trust ("Bond Counsel"), based upon an analysis of existing laws, regulations, rulings, and court decisions, and assuming, among other matters, compliance with certain covenants, interest on the Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the "Code"). Bond Counsel is of the further opinion that interest on the Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes. However, such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income for taxable years beginning before January 1, 2018. Bond Counsel expresses no opinion regarding any other federal tax consequences arising with respect to the ownership or disposition of, or the accrual or receipt of interest on, the Bonds.

The Code imposes various requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the Bonds. Failure to comply with these requirements may result in interest on the Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the Bonds. The Trust has covenanted to comply with such requirements to ensure that interest on the Bonds will not be included in federal gross income. The opinion of Bond Counsel assumes compliance with these covenants.

Bond Counsel is also of the opinion that, under existing law, interest on the Bonds and any profit made on the sale of Bonds are exempt from Massachusetts personal income taxes and that the Bonds are exempt from Massachusetts personal property taxes. Bond Counsel expresses no opinion regarding any other Massachusetts tax consequences arising with respect to the Bonds. Prospective Bondowners should be aware, however, that the Bonds are included in the measure of Massachusetts estate and inheritance taxes, and the Bonds and the interest thereon are included in the measure of certain Massachusetts corporate excise and franchise taxes. Bond Counsel has not opined as to the taxability of the Bonds or the income therefrom under the laws of any state other than Massachusetts. A complete copy of the proposed form of opinion of Bond Counsel is set forth in Appendix E hereto.

To the extent the issue price of any maturity of the Bonds is less than the amount to be paid at maturity of such Bonds (excluding amounts stated to be interest and payable at least annually over the term of such Bonds), the difference constitutes "original issue discount," the accrual of which, to the extent properly allocable to each owner thereof, is treated as interest on the Bonds which is excluded from gross income for federal income tax purposes and is exempt from Massachusetts personal income taxes. For this purpose, in general, the issue price of a particular maturity of the Bonds may be established by reference to the first price at which a substantial amount of such maturity of the Bonds is sold to the public (excluding bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The original issue discount with respect to any maturity of the Bonds accrues daily over the term to maturity of such Bonds on the basis of a constant interest rate compounded semiannually (with straight-line interpolations between compounding dates). The accruing original issue discount is added to the adjusted basis of such Bonds to determine taxable gain or loss upon disposition (including sale, redemption, or payment on maturity) of such Bonds. Bondowners should consult their own tax advisors with respect to the tax consequences of ownership of Bonds with original issue discount, including the treatment of purchasers who do not purchase such Bonds in the original offering to the public at the issue price established therefor.

Bonds purchased, whether at original issuance or otherwise, for an amount greater than the stated principal amount to be paid at maturity of such Bonds, or, in some cases, at the earlier redemption date of such Bonds ("Premium Bonds"), will be treated as having amortizable bond premium for federal income taxes purposes and Massachusetts personal income tax purposes. No deduction is allowable for the amortizable bond premium in the case of obligations, such as the Premium Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, a Bondowner's basis in a Premium Bond will be reduced by the amount of amortizable bond premium properly

allocable to such Bondowner. Holders of Premium Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

Prospective Bondowners should be aware that certain requirements and procedures contained or referred to in the Master Trust Agreement and other relevant documents may be changed and certain actions (including, without limitation, defeasance of the Bonds) may be taken or omitted under the circumstances and subject to the terms and conditions set forth in such documents. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken) or events occurring (or not occurring) after the date of issuance of the Bonds may adversely affect the value of, or the tax status of interest on, the Bonds.

Prospective Bondowners should be aware that from time to time legislation is or may be proposed which, if enacted into law, could result in interest on the Bonds being subject directly or indirectly to federal income taxation, or otherwise prevent Bondowners realizing the full benefit provided under current federal tax law of the exclusion of interest on the Bonds from gross income. To date, no such legislation has been enacted into law. However, it is not possible to predict whether any such legislation will be enacted into law. Further, no assurance can be given that any pending or future legislation, including amendments to the Code, if enacted into law, or any proposed legislation, including amendments to the Code, or any future judicial, regulatory or administrative interpretation or development with respect to existing law, will not adversely affect the market value and marketability of, or the tax status of interest on, the Bonds. Prospective Bondowners are urged to consult their own tax advisors with respect to any such legislation, interpretation or development.

Although Bond Counsel is of the opinion that interest on the Bonds is excluded from gross income for federal income tax purposes and is exempt from Massachusetts personal income taxes, the ownership or disposition of, or the accrual or receipt of interest on, the Bonds may otherwise affect a Bondowner's federal or state tax liability. Among other possible consequences of ownership or disposition of, or the accrual or receipt of interest on, the Bonds, the Code requires recipients of certain social security and certain railroad retirement benefits to take into account receipts or accruals of interest on the Bonds in determining the portion of such benefits that are included in gross income for federal tax purposes. The nature and extent of all such other tax consequences will depend upon the particular tax status of the Bondowner or the Bondowner's other items of income, deduction or exclusion. Bond Counsel expresses no opinion regarding any such other tax consequences, and Bondowners should consult with their own tax advisors with respect to such consequences.

### **UNDERWRITING**

The Underwriters, for whom Citigroup Global Markets Inc. is serving as representative (the "Representative"), have agreed, subject to certain conditions set forth in a contract of purchase to be entered into by the Trust and the Representative, to purchase from the Trust and to reoffer such Bonds at the public offering prices or yields set forth on the inside cover page hereof, upon receipt of compensation from the Trust in an aggregate amount equal to \$\_\_\_\_\_\_\_. The Underwriters will be obligated to purchase all the Bonds if any such Bonds are purchased. The Underwriters may offer and sell the Bonds to certain dealers and others (including dealers depositing Bonds into investment trusts) at prices lower than the public offering prices (or yields higher than the offering yields) stated on the inside cover page hereof. The public offering prices (or yields) set forth on the inside cover page hereof may be changed from time to time after the initial offering by the Underwriters. The obligation of the Underwriters to accept delivery of the Bonds is subject to the terms and conditions set forth in the contract of purchase, the approval of legal matters by counsel and other conditions.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage services. Certain of the Underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for the Trust, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities, which may include credit default swaps) and financial instruments (including bank loans) for their own account and

for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the Trust.

The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or public or express independent research views in respect to such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

In addition, certain of the Underwriters have entered into distribution agreements with other broker-dealers (that have not been designated by the Trust as Underwriters) for the distribution of the Bonds at the original issue prices. Such agreements generally provide that the relevant Underwriter will share a portion of its underwriting compensation or selling concession with such broker-dealers.

#### RATINGS

The Bonds have been rated "AAA" by Fitch Ratings, Inc. ("Fitch"), 33 Whitehall Street, New York, New York, "Aaa" by Moody's Investors Service ("Moody's"), 7 World Trade Center at 250 Greenwich Street, New York, New York, and "AAA" by S&P Global Ratings ("S&P"), 55 Water Street, New York, New York. The ratings assigned by Fitch, Moody's and S&P express only the views of the rating agencies. The explanation of the significance of the ratings may be obtained from the respective agencies. There is no assurance that any rating will continue for any period of time or that it will not be revised or withdrawn. Any revision or withdrawal of ratings on the Bonds may have an effect on the market price thereof.

# FINANCIAL ADVISOR

PFM Financial Advisors LLC has served as Financial Advisor to the Trust with respect to the sale of the Bonds. The Financial Advisor has assisted in various matters relating to the planning, structuring and issuance of the Bonds.

# **CERTAIN LEGAL MATTERS**

Legal matters incident to the authorization, issuance and sale of the Bonds will be approved by Hinckley, Allen & Snyder LLP, Bond Counsel, Boston, Massachusetts. The approving opinion of Bond Counsel with respect to the Bonds will be in substantially the form attached hereto as Appendix E. Certain matters will be passed upon for the Trust by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts, Program Counsel to the Trust. Certain legal matters will be passed upon for the Underwriters by Locke Lord LLP, Boston, Massachusetts. Certain legal matters have been or will be passed upon for each Borrower by its bond counsel, which includes in many cases Locke Lord LLP, including matters relating to the validity and enforceability of the obligations of such Borrower under the applicable Financing Agreement.

### OTHER AVAILABLE INFORMATION

The Trust prepares an Annual Report with respect to each fiscal year ending June 30 which generally becomes available in November of the following fiscal year. The Annual Report includes information relating to the Trust and its loan programs and operations and audited financial statements for the fiscal year ending June 30. The audited financial statements of the Trust for the fiscal year ended June 30, 2017 are available from the Trust and have been filed with the MSRB.

The Department of the State Auditor may also audit all agencies, departments and authorities of the Commonwealth, including the Trust. Copies of audit reports pertaining to the Trust, if any, may be obtained from the State Auditor, State House, Room 229, Boston, Massachusetts 02133.

Questions regarding this Official Statement or requests for additional information concerning the Trust, including its most recent audited annual financial statements, should be directed to Susan E. Perez, Executive Director, Massachusetts Clean Water Trust, One Center Plaza, Suite 430, Boston, Massachusetts 02108, telephone (617) 367-9333. Questions regarding legal matters pertaining to the Bonds should be directed to Kris A. Moussette and Antonio D Martini, Hinckley, Allen & Snyder LLP, 28 State Street, Boston, Massachusetts 02109-1775, telephone (617) 378-

4100. Questions regarding legal matters pertaining to the Trust and its SRF programs in general should be directed to John R. Regier, Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., One Financial Center, Boston, Massachusetts 02111, telephone (617) 542-6000.

Pursuant to the Trust's standards, adopted in accordance with the provisions of Rule 15c2-12(b)(5) under the Securities Exchange Act of 1934 (as amended, the "Rule"), if the aggregate principal amount of any Borrower's financing agreements under the SRF Program exceeds twenty percent (20%) of the aggregate principal amount of all financing agreements outstanding under the SRF Program, such borrower will be considered an "obligated person" and the Trust will require such Borrower to provide certain operating and financial information in connection with the issuance of the Trust's SRF Bonds. As of the issuance of the Bonds, the MWRA will be the only Borrower that has met such requirement. For further information about the MWRA, specific reference is made to the MWRA's Information Statement dated August 16, 2018 (the "MWRA Information Statement"). A copy of the MWRA Information Statement has been filed with the MSRB through its Electronic Municipal Market Access (EMMA) system. Copies of the MWRA Information Statement may also be obtained from the Trust. The MWRA Information Statement should be read in its entirety in order to obtain appropriate fiscal and financial information concerning the MWRA.

# CONTINUING DISCLOSURE

The Trust and the MWRA will undertake for the benefit of the owners (including beneficial owners) of the Bonds to provide certain continuing disclosure. The undertakings have been made pursuant to the provisions of the Rule.

More specifically, the Trust will agree for the benefit of the owners of the Bonds in a Continuing Disclosure Certificate to be executed by the Trust at or prior to the issuance of the Bonds to provide (i) audited financial statements of the Trust and (ii) information regarding the borrowers under the Trust's SRF Bond Program and the debt obligations of such borrowers to the Trust under the SRF Bond program in substantially the same level of detail as found in Appendix D - "SRF Bond Program – MTA Bonds Outstanding and Borrowers" in the table entitled "Borrowers" (collectively, the "Trust Annual Information") no later than 270 days after the end of each fiscal year and to provide notices of the occurrence of certain significant events. The Trust Annual Information will be filed by the Trust with the MSRB. Notices of significant events will be filed by the Trust with the MSRB. The nature of the information to be included in the Trust Annual Information and the notices of significant events is set forth under Appendix F – "Summary of Continuing Disclosure Undertakings."

In addition, each borrower will agree in its financing agreement to provide an annual report (a "Borrower Annual Report") to the Trust, containing or incorporating the most recently available audited financial statements of such borrower, not later than 270 days after the close of each fiscal year during any period during which such borrower is an "obligated person" (as defined above) with respect to the SRF Bonds within the meaning of the Rule, as evidenced by a notice to that effect furnished to the borrower by the Trust. The Trust will file the annual reports, if any, received from borrowers with the MSRB, at the same time and in the same manner as the Trust Annual Information. As of the date of issuance of the Bonds, the MWRA is the only borrower considered to be an "obligated person". In its financing agreement, the MWRA has agreed to provide certain annual financial and operating data for the benefit of the owners of the Bonds, in accordance with the Continuing Disclosure Agreement dated as of November 21, 1995, as amended, between the MWRA and U.S. Bank National Association, as Dissemination Agent. See Appendix F – "Summary of Continuing Disclosure Undertakings" for a summary of such information.

In addition, pursuant to Commonwealth Assistance Agreement, the Commonwealth has covenanted to provide annual financial information and operating data, not later than 270 days after the close of each fiscal year during any period during which the Commonwealth is an "obligated person" with respect to the Bonds within the meaning of the Rule, as evidenced by a notice to that effect furnished by the Trust to the Commonwealth. In accordance with a standard adopted by the Trust pursuant to the Rule, the Commonwealth shall be considered an "obligated person" with respect to the Bonds if twenty percent (20%) or more of the debt service on all of the Trust's outstanding SRF Bonds in any fiscal year is expected to be paid with Contract Assistance Payments. Pursuant to this standard, as of the date of issuance of the Bonds, the Commonwealth is not considered an obligated person with respect to the Bonds. The Trust will covenant in its Disclosure Certificate to annually determine if the Commonwealth constitutes an obligated person with respect to the Bonds and to notify the Commonwealth in the event that it is so determined.

The sole remedy for any owner or beneficial owner of a Bond upon any failure by the Trust, the Commonwealth or a borrower to fulfill its continuing disclosure undertakings is a suit in equity for specific performance of the undertakings and not for money damages.

# **FURTHER INFORMATION**

The references herein to and summaries of federal, Commonwealth and local laws, including but not limited to the Code, the laws of the Commonwealth, the Act, the Clean Water Act and the Drinking Water Act, and to certain documents and agreements pertaining to the Bonds, are summaries of certain provisions thereof. Such summaries do not purport to be complete and are qualified in their entirety by reference to such acts, laws, documents or agreements. Copies of the Master Trust Agreement, the Fourth Supplemental Trust Agreement, the Financing Agreements, the Commonwealth Assistance Contract and the Master Funding Agreement are available for inspection during normal business hours at the office of the Trust.

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Any statements in this Official Statement involving matters of opinion, whether or not expressly so stated
are intended as such and not as representations of fact. Neither this Official Statement nor any statement that may
have been made orally or in writing shall be construed as a contract or as a part of a contract with the Underwriters or
any holders of the Bonds.

	MASSACHUSETTS CLEAN WATER TRUST
	By:
	Deborah B. Goldberg
	Chair, Board of Trustees
, 2018	

# **APPENDIX A - DEFINITIONS OF CERTAIN TERMS**

In addition to the terms defined elsewhere in this Official Statement, the following are summary definitions of certain terms used in the Master Trust Agreement, the Supplemental Trust Agreement, the Financing Agreements and in this Official Statement.

In addition to the terms defined elsewhere in this Official Statement, the following are summary definitions of certain terms used in the Master Trust Agreement and in this Official Statement.

"Additional Bonds" shall mean Additional Senior Bonds and Additional Subordinate Bonds of the Trust issued pursuant to the terms of the Master Trust Agreement;

"Additional Senior Bonds" shall mean Bonds of the Trust issued pursuant to the Master Trust Agreement and designated as "Senior Bonds" as described in the Master Trust Agreement;

"Additional Subordinate Bonds" shall mean Bonds of the Trust issued pursuant to the Master Trust Agreement and designated as "Subordinate Bonds" as described in the Master Trust Agreement;

"Act" means, collectively, Chapter 275 of the Acts of 1989 of the Commonwealth, including without limitation, Chapter 29C of the General Laws of the Commonwealth, and Chapter 203 of the Acts of 1992 of the Commonwealth, in each case as amended from time to time;

"Administrative Expenses" means the Trust's expenses of implementing, financing, carrying out and administering its powers, duties and functions that are allocable to the Program as authorized by the Act;

"Administrative Fees" means annual or other periodic fees paid by or for the account of a Borrower to defray Administrative Expenses of the Trust relating to the Program in the amounts set forth in, or determined in accordance with, the applicable Financing Agreement;

"Aggregate Debt Service" for any Fiscal Year means, as of any date of calculation, the sum of the amounts of Debt Service for such year with respect to the Bonds Outstanding;

"Authorized Officer," with respect to the Trust, means any Trustee of the Trust (or any designee thereof pursuant to the Act), any member of the Trust's Executive Committee, the Executive Director or the Treasurer of the Trust or any other officer of the Trust authorized by resolution of the Board to perform the act or sign the document in question, and, with respect to any action to be taken by a Borrower or any document to be signed on behalf of a Borrower, means any member, officer or employee of a Borrower authorized to take such action or sign the document in question under the applicable Financing Agreement;

"Beneficial Owner" means the person or entity that is considered to be the beneficial owner of any Bond pursuant to the arrangements for book entry determination of owner;

"Bond" or "Bonds" or "MTA Bonds" means any bond or bonds or all bonds, as the case may be, of the Trust, in one or more Series, relating to the Program and issued, authenticated and delivered under the Master Trust Agreement and any bond or bonds duly issued in exchange or replacement therefor;

"Bond Act" means, collectively, the laws of the Commonwealth, including without limitation the Act, under or pursuant to which any local governmental obligations are issued by a Borrower to the Trust;

"Bond Counsel" means any counsel nationally recognized as experienced in matters relating to bonds issued by states and their political subdivisions selected by the Trust and satisfactory to the Master Trustee;

"Bondowner" and the term "Bondholder", "holder", "Owner" or "owner" or any similar term, when used with reference to Bonds, means the registered owner of any Bond or the Beneficial Owner, as the case may be;

"Bond Year" means the twelve-month period beginning on the date of original delivery of the Bonds and each successive twelve-month period thereafter unless otherwise defined by the Trust;

"Borrower" means the local governmental unit or other eligible borrower which is the obligor on such Loan, or any body, agency, political subdivision, officer or other instrumentality of the Commonwealth, or any corporation, association, partnership or other entity, as applicable, which shall succeed to the powers, duties and functions of said local governmental unit or other eligible borrower;

"Borrower Payments" means all payments on account of the principal, interest and premium, if any, due on each Loan including without limitation (1) scheduled payments of principal and interest on such Loan, (2) prepayments of principal or interest and any additional amounts payable upon prepayment of such Loan, and (3) any amounts paid or received with respect to such Loan on account of (i) acceleration of the due date of such Loan, (ii) subject to the provisions of the Master Trust Agreement, the sale or other disposition of such Loan and any collateral securing the same, (iii) the receipt of proceeds of any insurance or guaranty of such Loan, and (iv) the exercise of any right or remedy granted or available under law or the applicable Financing Agreement upon the occurrence of a default thereunder; provided that Borrower Payments related to Prior Loans shall only include amounts actually transferred to the Master Trustee as described below under the heading "Prior Bond Revenues". To the extent provided in the applicable Financing Agreement, the term "Borrower Payments" shall also mean and include any Contract Assistance Payments that are applied as credit against the payment obligations of the Borrower under such Financing Agreement. The term "Borrower Payments" shall not include any Administrative Fees or Origination Fees;

"Business Day" means any day other than a Saturday, a Sunday or any other day on which banks doing business in the Commonwealth are authorized or required to be closed for business;

"Clean Water Act" means Title VI of the Federal Water Pollution Control Act (Pub. L. 92-500, commonly known as the Clean Water Act), as amended by the Federal Clean Water Act of 1987 (Pub. L. 100-4), as the same may be further amended from time to time, and all regulations of the United States Environmental Protection Agency applicable thereto, as amended from time to time;

"Clean Water Obligation" means a Loan to finance or refinance all or any part of the Cost of a Clean Water Project;

"Clean Water Program" means the program administered by the Trust and the Department in accordance with the Act and the Master Trust Agreement to fund Projects or finance Loans to Borrowers for Costs of Clean Water Projects;

"Clean Water Project" means a water pollution abatement project;

"Clean Water State Revolving Fund" and the term "Clean Water SRF" means the Water Pollution Abatement Revolving Fund established pursuant to Section 2L of Chapter 29 of the General Laws of the Commonwealth;

"Code" means the Internal Revenue Code of 1986, as amended from time to time, and all Treasury Regulations promulgated thereunder to the extent applicable to any Bonds or Loans, as the case may be;

"Commonwealth" means The Commonwealth of Massachusetts;

"Commonwealth Assistance Contract" means the Amended and Restated Agreement for Contract Assistance dated as of June 1, 2018 between the Commonwealth and the Trust, as further amended from time to time in accordance therewith;

"Commonwealth Matching Grant" means an amount provided to the Trust in accordance with the Clean Water Act or the Drinking Water Act, as applicable, the Act and the Master Funding Agreement as a matching grant to a Federal Capitalization Grant;

"Contract Assistance Determination" shall have the meaning given such term in the Commonwealth Assistance Contract;

"Contract Assistance Payments" means payments, if any, made to the Trust by the Commonwealth in accordance with Section 6 of the Act and the Commonwealth Assistance Contract, together with the earnings, if any, upon investment or deposit of such payments with the Master Trustee, including without limitation any amounts received by the Trust on account of the exercise of any right or remedy granted or available under law or the Commonwealth Assistance Contract upon the occurrence of a default by the Commonwealth thereunder, to be applied by the Trust to pay Debt Service on the Bonds, as more fully described in the applicable Contract Assistance Determination;

"Cost" when used with reference to a Project, means any "cost" thereof (as defined in the Act) approved by the Department including without limitation all costs, whenever incurred, of carrying out a Project (whether or not eligible for financial assistance pursuant to Section 6 of the Act), costs of planning, preparation of studies and surveys, design, construction, expansion, facilities, improvement and rehabilitation, acquisition of real property, personal property, materials, machinery or equipment, start-up costs, demolitions and relocations, reserves and working capital, administrative, legal and financing expenses, and other expenses necessary or incidental to the foregoing;

"Costs of Issuance" means any items of expense directly or indirectly payable by or reimbursable to the Trust and related to the authorization, sale and issuance of any Series of Bonds and the investment of the proceeds thereof, including, but not limited to, printing costs, costs of reproducing documents, filing and recording fees, initial fees and charges of Fiduciaries, legal fees and charges, professional consultants' fees, costs of credit ratings, premiums for insurance of the payment of Bonds, premiums for insurance insuring the Trust against loss on Loans or insuring the receipt by the Trust of Commonwealth Matching Grants, or Contract Assistance Payments allocable to the Bonds, fees and charges for execution, transportation and safekeeping of Bonds or Loans, costs and expenses of refunding of Bonds or other obligations, fees and expenses payable in connection with any remarketing agreements, tender agent agreements or interest rate indexing agreements and other costs, charges and fees in connection with the original issuance of Bonds;

"Credit Enhancement" shall mean any agreement, including, but not limited to, a policy of bond insurance, surety bond, irrevocable letter of credit, credit agreement, credit facility or guaranty arrangement with a bank, trust company, insurance company, surety bonding company, pension fund or other financial institution that provides increased credit on or security for any Series of Bonds (or portion thereof) or the obligations of the Trust under any Qualified Hedge Agreement and, to the extent authorized by a Supplemental Trust Agreement, provided that either the provider or the party guaranteeing the obligations of the provider has, at the time such agreement is entered into, unsecured obligations rated in the highest short-term Rating Category by each Rating Agency then maintaining a rating on the Bonds Outstanding;

"Debt Service" means, with respect to Bonds Outstanding in any particular period, an amount equal to the sum of (1) all interest payable on such Bonds during such period (other than interest, if any, included in the principal on such Bonds payable in such period) plus (2) the principal of such Bonds payable during such period, as calculated pursuant to the Master Trust Agreement. Unless a notice of redemption of Bonds or a portion thereof shall have been duly given as provided in the Master Trust Agreement and amounts sufficient to provide for the payment of the Redemption Price and interest on such Bonds are available therefor in the Senior Redemption Fund, Subordinate Redemption Fund, the Senior Debt Service Fund and the Subordinate Debt Service Fund, as applicable, the Debt Service for any particular period for the Bonds shall be calculated on the assumption that no Bonds Outstanding on the date of calculation will cease to be Outstanding except by reason of the payment of each principal on the due date thereof;

"Debt Service Payment Date" shall have the meaning set forth in the applicable Supplemental Trust Agreement;

"Defeasance Obligations" means the securities listed in Clauses (1) - (3) of the definition of Investment Obligations;

"Department" means the Department of Environmental Protection of the Commonwealth, or any body, agency, officer or other instrumentality of the Commonwealth which shall succeed to the powers, duties and functions of the Department as described in the Act;

"DEP Regulations" means, respectively, the regulations of the Department applicable to the Clean Water Program appearing in 310 CMR 44.00 and the regulations of the Department applicable to the Drinking Water Program appearing in 310 CMR 45.00 as such regulations may be amended from time to time; for purposes only of Title 5 Projects, the term "DEP Regulations" shall include the Department's Community Septic Management Program Description and Requirements, as amended and supplemented from time to time;

"Drinking Water Act" means Title XIV of the Federal Public Health Service Act, commonly known as the Safe Drinking Water Act, 42 USC § 300f et seq. as the same may be further amended from time to time, and all regulations of the United States Environmental Protection Agency applicable thereto as amended from time to time;

"Drinking Water Obligation" means a Loan issued to finance or refinance all or any part of the Cost of a Drinking Water Project;

"Drinking Water Program" means the program administered by the Trust and the Department in accordance with the Act and the Master Trust Agreement to fund Projects or finance Loans to Borrowers for Costs of Drinking Water Projects;

"Drinking Water Project" means a drinking water project;

"Drinking Water State Revolving Fund" and the term "Drinking Water SRF" means the Drinking Water Revolving Fund established pursuant to Section 2QQ of Chapter 29 of the General Laws of the Commonwealth;

"Equity Fund" means collectively the Clean Water Equity Fund and the Drinking Water Equity Fund.

"Event of Default" means an Event of Default as such term is defined under the Article of the Master Trust Agreement entitled "Events of Default";

"Federal Capitalization Grant" means amounts provided to the Trust under one or more agreements between the Trust and the United States of America acting by and through the United States Environmental Protection Agency to be applied in accordance with the Clean Water Act or the Drinking Water Act, as applicable, to fund loans made or obligations purchased by the Trust;

"Fiduciary" means the Master Trustee and any Paying Agent;

"Financing Agreement" means an agreement between the Trust and a Borrower pertaining to a Loan the making or purchase and repayment thereof, including, without limitation, any "loan agreement" and any other trust agreement, trust indenture, security agreement, bond purchase agreement, reimbursement agreement, guarantee agreement, bond or note resolution, loan order or similar instrument, other than a Regulatory Agreement, pertaining to or securing such Loan;

"Fiscal Year" means the period of twelve calendar months ending with June 30 of any year;

"Fixed Rate Hedge Agreement" shall mean a Qualified Hedge Agreement requiring the Trust to pay a fixed interest rate on a notional amount;

"Fixed Hedge Rate" shall mean the fixed interest rate payable by the Trust on a notional amount under a Fixed Rate Hedge Agreement;

"Funds" and "Accounts" means the funds and accounts established by or pursuant to the Master Trust Agreement and under any Supplemental Trust Agreement;

"Grant Agreement," with respect to any Federal Capitalization Grants or Commonwealth Matching Grants, means the agreements or other instruments, if any, under which such Federal Capitalization Grants or Commonwealth Matching Grants are provided to the Trust for purposes of the Program, including, without limitation, the Master Funding Agreement;

"Hedge Provider" shall mean the counterparty with which the Trust enters into a Qualified Hedge Agreement;

"Interim Loan" means a temporary loan, whether or not interest bearing, provided by the Trust to a Borrower in accordance with a Financing Agreement for all or any part of the Cost of a Project in anticipation of a Loan and funded by the Trust from amounts held in or for the account of the Interim Loan Account of the Clean Water Equity Fund or the Drinking Water Equity Fund under the Master Trust Agreement;

"Investment Obligation" means any of the investments listed in Exhibit A to the Master Trust Agreement;

"Investment Obligor" means the issuer or other obligor on an Investment Obligation in which moneys held for the credit of any Fund or Account hereunder have been invested or deposited in accordance herewith;

"Liquidity Facility" shall mean any agreement with a bank, trust company, insurance company, surety bonding company, pension fund, investment banking company or other financial institution under which it agrees to purchase Tender Bonds, provided that either the provider or the party guaranteeing the obligations of the provider has, at the time such agreement is entered into, unsecured obligations rated in the highest short-term Rating Category by each Rating Agency then maintaining a rating on the Bonds Outstanding;

"Loan" means any (i) loan or other form of financial assistance subject to repayment, whether or not interest bearing, provided by the Trust to a Borrower in accordance with a Financing Agreement for the purpose of financing or refinancing all or any part of the Cost of a Project, including any local governmental obligations or other security evidencing or securing any such loan or (ii) local governmental obligations, whether or not interest bearing, purchased by the Trust from a Borrower, all of the proceeds of which are expected at the date of purchase of such local governmental obligations, or on the date of authentication and delivery of the Bonds if earlier (as evidenced by a certificate of an Authorized Officer of the Trust delivered to the Master Trustee), to be applied by the Borrower directly or indirectly to finance or refinance Costs of a Project, which in each case (1) complies, at the time such financial assistance is provided by the Trust or at the time such obligations are purchased from amounts held under the Master Trust Agreement, with the provisions of the Act and the Master Trust Agreement, (2) is provided, refinanced or made or purchased with proceeds of Bonds or other moneys held under the Master Trust Agreement, and (3) is held under the Master Trust Agreement or (iii) Loan made prior to the date of the Master Trust Agreement which is not otherwise pledged to Prior Bonds under a Prior Bond Resolution or (iv) Prior Loans;

"Local Bond Counsel" means an attorney or firm of attorneys (who may also be counsel to the Trust, the Commonwealth or the Master Trustee) nationally recognized as experienced in matters relating to bonds issued by states and their political subdivisions selected by a Borrower and satisfactory to the Trust;

"Master Funding Agreement" means the Amended and Restated Master Funding Agreement dated as of December 3, 2014 among the Trust, the Department, the Secretary and the State Treasurer, as amended from time to time in accordance therewith;

"Opinion of Counsel" means an opinion signed by an attorney or firm of attorneys selected by the Trust (and who may be Bond Counsel or an attorney in the regular employment of the Trust or the Commonwealth) satisfactory to the Master Trustee;

"Origination Fees" means any fees, other than Administrative Fees, payable by a Borrower in accordance with the applicable Financing Agreement in consideration of, or in payment or reimbursement for, costs incurred by the Trust in connection with the origination of Loans and the issuance of Bonds to fund the same;

"Outstanding," means, (i) with respect to any Bond issued hereunder, as of any particular date, all Bonds theretofore and thereupon being authenticated and delivered except (1) any Bond canceled by the Master Trustee, or

proven to the satisfaction of the Master Trustee to have been canceled by the Trust or by any other Fiduciary at or before said date, (2) except as otherwise provided in the Master Trust Agreement, any Bond for the payment or redemption of which moneys equal to the principal amount or Redemption Price thereof, as the case may be, with interest, if any, to the maturity or redemption date, shall have theretofore been deposited with the Master Trustee in trust (whether upon or prior to maturity or the redemption date of such Bond) and, except in the case of a Bond to be paid at maturity, of which notice of redemption shall have been given or provided for in accordance with the Master Trust Agreement, (3) any Bond in lieu of or in substitution for which another Bond shall have been delivered pursuant to the Master Trust Agreement; and (4) any Bond deemed to have been paid as provided in the Master Trust Agreement under the section entitled "Defeasance" and (ii) with respect to any Prior Bond, as defined in the applicable Prior Bond Resolution;

"Parity Hedge Agreement" means any Qualified Hedge Agreement pursuant to which any obligation of the Trust to make all or any portion of the Scheduled Hedge Payments thereunder is secured by a pledge of the Trust Estate on a parity with the pledge thereof created under Master Trust Agreement for the benefit of the Owners of the related Series of Senior Bonds or Subordinate Bonds.

"Paying Agent" means initially the Master Trustee and any paying agent for Bonds appointed by or pursuant to the Master Trust Agreement, and any successors or successors thereto appointed pursuant to the Master Trust Agreement;

"Payment Default" as the context requires, means (i) any failure by a Borrower to pay when due all or any part of its Borrower Payment payable on the related Loan pursuant to the applicable Financing Agreement; (ii) any failure by the Commonwealth to pay to the Trust when due all or any part of a Contract Assistance Payment pursuant to the Commonwealth Assistance Contract and the applicable Contract Assistance Determination; (iii) any failure by an Investment Obligor to pay to the Trust when due all or any part of the earnings payable under any Investment Obligation; (iv) any failure by the Trust to pay the principal (including mandatory sinking fund installments) of, and interest and premium, if any, on any of the series of Bonds or Prior Bonds when due or to make any Scheduled Hedge Payments payable under a Parity Hedge Agreement or any Reimbursement Obligation secured on parity with the Bonds;

"Principal Office," when used with respect to a Fiduciary, means the office where such Fiduciary maintains its principal office or, where different, its principal corporate trust office;

"Prior Bond Resolutions" means collectively, (i) each of the Trust's Water Pollution Abatement and Drinking Water Project Bond Resolutions (Pool Program), as amended, (ii) the Trust's Water Pollution Abatement Bond Resolution (MWRA Program) adopted March 4, 1993, as amended and supplemented through August 25, 2004, as amended and supplemented, pursuant to which the Trust issued Prior Bonds secured by the pledge thereunder and under the Program Resolution and (iii) any other bond resolution adopted by the Trust to provide for the refunding of Prior Bonds as permitted by the Program Resolution;

"Prior Bond Revenues" means, except as otherwise provided in the applicable Prior Bond Resolution, (1) all Borrower Payments and all other receipts, fees, revenues and other payments, other than Administrative Fees, received or to be received by the Trust on account of the Prior Loans and the exercise of the Trust's rights and remedies under or pursuant to the Financing Agreements applicable thereto, (2) all Contract Assistance Payments related to Prior Loans, (3) all Net Earnings (as defined in the Prior Bond Resolutions) received on investment or deposit of moneys held pursuant to the Prior Bond Resolutions, and paid or to be paid into the revenue funds held or created under the applicable Prior Bond Resolution, (4) any other receipts, fees, grants, appropriations, revenues and other payments received or to be received by the Trust and required by the terms of the Program Resolution or the Prior Bond Resolutions, as applicable, to be deposited in one or more of the Funds and Accounts maintained under or pursuant to the applicable Prior Bond Resolution; specifically excluding from the definition of Prior Bond Revenues, any amounts that are required to be transferred under the Prior Bond Resolutions to the Program Trustee for deposit in any account of the Pool Program Reserve Fund, Deficiency Fund or the Leveraged Bond Fund held under the Program Resolution.

"Prior Bonds" means, as of any date, all bonds then Outstanding of the Trust issued prior to the date of the Master Trust Agreement under the Prior Bond Resolutions and any bonds issued to refund Prior Bonds under a new bond resolution adopted in accordance with the Program Resolution;

"Prior Loans" means Loans which are held under, and subject to the lien of, the Prior Bond Resolutions or the Program Resolution, which relate to, or secure, Refunded Prior Bonds.

"Program" means the Clean Water Program or the Drinking Water Program, as the context requires, and, collectively, means both said Programs;

"Program Assets" means, for any period, (i) Program Revenues, (ii) all moneys transferred from the Program Trustee to the Master Trustee to be deposited in the Clean Water Equity Fund or the Drinking Water Equity Fund, and (iii) the balance of the Clean Water Equity Fund and Drinking Water Equity Fund at the time of calculation;

"Program Resolution" means the resolution adopted by the Trust on March 4, 1993, as amended through December 3, 2014 entitled "Amended and Restated Resolution Authorizing and Establishing a Water Pollution Abatement and Drinking Water Project Financing Program," as the same may be further amended or supplemented from time to time in accordance with its terms;

"Program Revenues" means, for any period, (i) Borrower Payments to be received during such period, (2) all earnings received or to be received on investment or deposit of moneys in the Funds and Accounts held pursuant to the Master Trust Agreement and paid or to be paid into the Revenue Fund, (3) all Contract Assistance Payments paid to the Trust by the Commonwealth that are allocable to the Loans, and (4) to the extent not already included in (1), (2) or (3), Prior Bond Revenues;

"Program Trustee" means the trustee appointed by or pursuant to Section 801 of the Program Resolution, and any successor or successors thereto appointed pursuant to the Program Resolution;

"Project" means a Clean Water Project or a Drinking Water Project, as the context requires, and with respect to the Tax-Exempt Bonds, which is also a "capital project" as defined in Treasury Regulations §1.148-1(b) (exclusive of related working capital expenditures);

"Qualified Hedge Agreement" shall mean an interest rate exchange, cap, floor or collar agreement between the Trust and a Hedge Provider based upon a notional amount, where either (a) the Hedge Provider, or the party guaranteeing the obligation of the Hedge Provider to make any payments due to the Trust, has unsecured long-term obligations rated, or the hedge agreement itself is rated, in each case as of the date the hedge agreement is entered into, by each Rating Agency then maintaining a rating on the Bonds Outstanding, in one of the two highest Rating Categories of such Rating Agency or (b) the Trust received a Rating Confirmation with respect to such hedge agreement prior to entering into such hedge agreement; provided that with respect to Prior Bonds, it shall have the meaning set forth in the applicable Prior Bond Resolution;

"Qualified Hedge Payments" shall mean, collectively, all Scheduled Hedge Payments and all Termination Hedge Payments payable by the Trust or a Hedge Provider, as the case may be, under a Qualified Hedge Agreement;

"Rating Agency" means a nationally recognized credit rating agency that has assigned and currently maintains a rating on any Bonds Outstanding at the request of the Trust, and any successor to any such agency by merger, conversion, consolidation or otherwise;

"Rating Category" means a rating category as published by a Rating Agency in its written compilations of ratings and any written supplement or amendment thereto and any such Rating Category shall be determined on the generic rating without regard to any modifiers and, unless otherwise specified herein or in an applicable Supplemental Trust Agreement, shall be long term ratings;

"Rating Confirmation," with respect to any action taken or to be taken hereunder, shall mean a letter (or other evidence satisfactory to the Master Trustee) from a Rating Agency to the effect that it will not lower, suspend or otherwise adversely affect any underlying rating then maintained on any Bonds Outstanding, without regards to any Credit Enhancement, as a result of such action;

"Rebate Computation Date" means any date that the arbitrage rebate liability and yield restriction liability with respect to a Tax-Exempt Bond is computed;

"Rebate Installment Computation Date" means any date that the arbitrage rebate liability and yield restriction liability with respect to a Tax-Exempt Bond is computed and if a liability has accrued, an arbitrage rebate payment and/or a yield reduction payment with respect to the applicable Tax-Exempt Bonds is due within 60 days of such Rebate Installment Computation Date;

"Rebate Provision" means Section 148(f) of the Code and, to the extent applicable to a Series of Tax-Exempt Bonds, Treasury Regulation §1.148-5(c);

"Rebate Requirement" means an amount equal to (i) the cumulative sum calculated and determined from time to time in accordance with the requirements of the Rebate Provision that must be paid to the United States pursuant to the section entitled "Refund Fund" under the Master Trust Agreement, less (ii) the aggregate amount of any payments made to the United States pursuant to the Rebate Provision in accordance with the Master Trust Agreement;

"Redemption Price," when used with respect to a Bond or portion thereof, shall have the meaning set forth in the applicable Supplemental Trust Agreement;

"Refunded Prior Bonds" means all or any portion of Prior Bonds that have been refunded with proceeds of Bonds issued under the Master Trust Agreement.

"Refunding Bonds" means Bonds of the Trust issued pursuant to the section of the Master Trust Agreement entitled "Special Conditions Precedent to the Delivery of Refunding Bonds".

"Refunding Prior Bonds" means all or any portion of Prior Bonds that refunded or will refund other Prior Bonds.

"Refunding Prior Resolution" means collectively or individually as the context requires, any of the Prior Bond Resolutions pursuant to which Refunding Prior Bonds were or are issued.

"Regulatory Agreement" means an agreement between the Department and a Borrower pertaining to the acquisition, construction, operation and carrying out of a Project financed in whole or in part from the proceeds of a Loan;

"Registered Owner" or "Owner," when used with reference to any Series of Bonds, shall mean the registered owner of the Bonds as shown on the registration books of the Trust held by the Master Trustee;

"Reimbursement Obligation" means amounts paid under the terms of a Credit Enhancement or Liquidity Facility together with interest thereon that the Trust has agreed with the issuer of any Credit Enhancement or Liquidity Facility to reimburse such issuer from amounts held under the Master Trust Agreement or otherwise legally available to the Trust for such purpose.

"Representation Letter" means the letter from the Trust to the Bond Depository dated January 6, 2015;

"Revenues" means (1) all Borrower Payments, (2) all earnings received or to be received on investment or deposit of moneys in the Funds and Accounts held pursuant to the Master Trust Agreement and paid or to be paid into the Revenue Fund, (3) all Contract Assistance Payments paid to the Trust by the Commonwealth which are allocable to the Loans, and (4) any other receipts, fees, grants, appropriations, revenues and other payments received or to be received by the Trust and required by the terms of the Master Trust Agreement to be deposited in one or more of the Funds and Accounts maintained under or pursuant to the Master Trust Agreement;

"Scheduled Hedge Payments" except as otherwise provided in the applicable Supplemental Trust Agreement, shall mean the scheduled, periodic payments to be made by the Trust or a Hedge Provider, as the case may be, under a Qualified Hedge Agreement with respect to a notional amount;

"Secretary" means the Secretary of the Executive Office for Administration and Finance of the Commonwealth:

"Series" when used with respect to less than all of the Senior Bonds or Subordinate Bonds, shall mean such Senior Bonds or Subordinate Bonds designated as a Series of Bonds pursuant to a Supplemental Trust Agreement;

"Series Debt Service Reserve Fund Requirement" shall mean, the amount, if any, required to be deposited in the Senior Debt Service Reserve Fund or the Subordinate Debt Service Reserve Fund pursuant to a Supplemental Trust Agreement;

"Sinking Fund Payment" means the amount of moneys designated as such to be paid by the Trust toward the retirement of any particular Bonds at or prior to their respective stated maturities in accordance with the applicable Supplemental Trust Agreement;

"State Treasurer" means the Treasurer and Receiver-General of the Commonwealth;

"Supplemental Trust Agreement" means any trust agreement of the Trust amending or supplementing the Master Trust Agreement adopted and becoming effective in accordance with the terms of the Master Trust Agreement;

"Tax Exempt Bonds" shall mean any Bonds accompanied by a Bond Counsel's opinion upon the original issuance thereof that the interest on such Bonds is not includable in the gross income of the Registered Owner thereof for Federal income tax purposes;

"Termination Hedge Payments," except as otherwise provided in an applicable Supplement Trust Agreement, shall mean all payments, other than Scheduled Hedge Payments, to be made by the Trust or a Hedge Provider, as the case may be, under a Qualified Hedge Agreement;

"Title 5 Project" means a community septic management loan program, constituting a Clean Water Project, to assist eligible homeowners to upgrade failing septic systems and otherwise to comply with the requirements of 310 CMR 15.000 et seq. through underlying betterment agreements with such homeowners;

"Transfer Requisition" shall have the meaning given such term in the Commonwealth Assistance Contract.

"Trust" means the Massachusetts Clean Water Trust, formerly known as the Massachusetts Water Pollution Abatement Trust, an instrumentality of the Commonwealth organized and existing under the Act, or any body, agency, political subdivision, officer or other instrumentality of the Commonwealth which shall succeed to the powers, duties and functions of the Trust;

"Trust Estate" has the meaning ascribed to such term in the section of the Master Trust Agreement entitled "The Pledge Effected by the Trust Agreement";

"Variable Rate Hedge Agreement" shall mean a Qualified Hedge Agreement requiring the Trust to pay a variable interest rate on a notional amount; and

"Yield" means the yield on any Series of Tax-Exempt Bonds or the yield on any investment under the Master Trust Agreement, as applicable, calculated as required by Treasury Regulations §§1.148-4 and 1.148-5.



# APPENDIX B SERIES 21 GREEN BOND PROJECT DESCRIPTIONS PROJECTS TO BE FINANCED WITH SERIES 21 BOND PROCEEDS\*

For a description of certain terms and acronyms used in this Appendix B, see the Glossary of Terms immediately following the Project Descriptions.

Borrower	Program	Amount to be Financed	Project Description	Percentage of Loan Drawn
Adams Fire District	DW	\$538,518	The goal of this project was to rehabilitate the Well 4 Pump Station, where the pumping, electrical and mechanical equipment had exceeded its useful life. The benefits of this project included increasing safety for workers, reducing the risk of supply interruptions to the district's customers, and assisting the district in compliance with the Water Management Act. The project involved the following major components: removal and replacement of outdated pumping and chemical feed; updating of heating, ventilation, and air conditioning (HVAC) and electrical equipment; building upgrades to meet current building codes; energy efficiency measures; addition of a supervisory control and data acquisition (SCADA) system; replacement of discharge piping; and the addition of an access vault to the venturi meter.	97.90%
Brockton	CW	\$2,975,722	The Taunton River watershed has water quality impairments during both wet and dry weather conditions due to bacteria pollution. The causes include sewerage exfiltration, stormwater discharges, illicit connections to the drainage system, and failing septic systems. This sewer rehabilitation project includes repair of prioritized areas in the city's wastewater collection system to address sources of exfiltration, infiltration and inflow, and sections of undersized pipe. The work will include open cut repairs, cured-in-place (CIP) sewer pipe lining, and rehabilitation of manholes. These projects were identified based on the IDDE program, the existing sewer system evaluation study and capacity evaluations.	70.87%
Chatham	DW	\$9,274,815	This project is for building a drinking water treatment facility and protecting drinking water sources from high levels of iron and manganese. Wells 6, 7, and 9 need treatment for iron and manganese. Chatham has a total of seven wells. Wells 6 & 7 are run during the summer to meet peak demands. If any wells are offline, the remaining wells are operated on a schedule that is not sustainable.	85.24%

<sup>\*</sup> Preliminary, subject to change.

Borrower	Program	Amount to be Financed	Project Description	Percentage of Loan Drawn
Fall River	CW	\$487,150	The objective of this project was to lessen CSOs in Fall River to achieve compliance with state and federal CSO regulations and a federal court order. The work involved the construction of CSO controls for the President Avenue CSO outfall and other CSO outfalls to the Taunton River and Mt. Hope Bay. This project was part of a multi-year undertaking. Planned CSO control projects included several additional CSO screening and disinfection facilities along with sewer separation projects. The City of Fall River had a combined system with 19 CSO outfalls that discharged to the Mt. Hope Bay, Taunton River or Quequechan River. These CSO outfalls discharged untreated stormwater runoff and sewage during wet weather into receiving waters.	95.07%
Fall River	CW	\$4,105,174	The Globe Street sewer improvements included upsizing approximately 720 linear feet of combined sewer from 33-inches to 66-inches. The work stretched from Globe Four Corners to the CSO tunnel junction chamber on Globe Street. Upsizing the sewer to the CSO tunnel junction chamber allowed combined sewage to flow unobstructed to the CSO tunnel drop shaft, eliminating the conveyance restriction that caused flooding, surcharging and combined sewer backups at Globe Four Corners.	90.25%
Fall River	DW	\$428,194	The project aims to create a high service area at the Airport Road Industrial Park. The existing tank will be replaced with a taller tank to improve pressures in the new high service area. A new booster pump station will be constructed. A water main will be replaced and upgraded to connect the new pump station and tank to the existing system.	66.22%
Fall River	DW	\$139,747	The project includes the replacement of approximately 19,000 linear feet of cast iron water mains and 19 lead service lines. In addition, this project also includes installation of a new sanitary grinder pump station for discharge of domestic sewage from the city's WTP. The project also involves placing the residual pump station and associated electrical and control systems.	0.00%

Borrower	Program	Amount to be Financed	Project Description	Percentage of Loan Drawn
Fall River	DW	\$3,512,338	The city entered the sixteenth year of its annual cast iron water main and lead service line replacement program. Phase 16 water main improvements included the rehabilitation or replacement of approximately 16,500 linear feet of cast iron water mains and 106 lead service lines. The goal was to eliminate potentially serious and preventable health threats such as lead contamination. This project also aimed to provide safe and reliable drinking water to residents.	87.28%
Fitchburg	CW	\$2,068,695	This project consists of separating approximately 5,200 linear feet of combined sewers in the Beech Street and Hazel Street areas. This will be achieved by installing new storm drains and catch basins; repairing and rehabilitating existing sewers and manholes, removing illicit connections; and general street improvements.	71.23%
Fitchburg	CW	\$9,017,418	The Fitchburg Easterly WWTF is a secondary treatment facility with current average annual flows of about 9.8 million gallons a day. This project includes elements intended to improve the facility's discharge permit compliance. These include: upgrades to the secondary treatment system with a biological selector zone to increase peak flow capacity, provide biological nutrient removal; replace existing primary and secondary sludge pumps, aeration blowers, pipes, valves, fine bubble diffuser, clarifier mechanisms, surface repairs to existing concrete aeration and clarifier tanks; installation of two new emergency generators; and instrumentation and electrical improvements; and modifications to the existing flood protection berm.	100.00%
Hadley	DW	\$172,998	To improve water system reliability, the town plans to address existing system deficiencies. There is a water main that is approximately 100 years old on the north side of Russell Street. Failures within the project area average two per year and have created loss of water service and traffic disruptions. Remnants of pipe removed during repairs show severe tuberculation and customers connected to the main have reported low pressure. The proposed project addresses ongoing service interruptions, low pressure complaints, and may help to reduce the system's unaccounted water, which exceeds the Water Management Act limit of 10%.	100.00%

Borrower	Program	Amount to be Financed	Project Description	Percentage of Loan Drawn
Haverhill	DW	\$8,645,659	The Haverhill WTP has provided the city with service beyond its useful life. Critical components are aging and approaching obsolescence, with acquisition of replacement parts difficult or impossible. This project includes an upgrade to treatment capacity from approximately 10-million gallons per day (MGD) to 12.1 MGD to provide much needed redundancy of primary treatment components and to replace outdated systems. The updated plant will meet the needs of the city under a variety of existing and future conditions.	100.00%
Haverhill	DW	\$2,549,127	This project included improvements for the Kenoza Lake WTP and within the distribution system to provide redundancy to the Gale Hill Storage Tank and the distribution system. The project also included rehabilitating an existing 20-inch transmission main to increase capacity, re-establish isolation control and provide redundancy in the distribution system. Water systems that lack redundancy are at risk for prolonged loss of service if a single critical system element falls out of service.	78.64%
Massachusetts Water Resources Authority (MWRA)	CW	\$2,194,852	The Caruso Pump Station Improvements Project is one of four critical wastewater system improvements projects that MWRA has identified. The purpose of the project is to replace the standby power generator system and to improve the HVAC, fire detection/suppression, and security systems. This will significantly improve pump station reliability, operations, safety and efficiency.	0.00%
MWRA	CW	\$3,394,837	This project includes upgrades to the Deer Island WWTP automation and central control systems. In addition, the project includes improvements and upgrades to several existing interceptors and pump stations that need replacement and/or modernization. The project is intended to extend current asset life and improve system operability.	0.00%
MWRA	CW	\$3,249,355	This project also includes upgrades to the Deer Island WWTP automation and central control systems. In addition, the project includes improvements and upgrades to several existing interceptors and pump stations that need replacement and/or modernization. The project is intended to extend current asset life and improve system operability.	0.00%

Borrower	Program	Amount to be Financed	Project Description	Percentage of Loan Drawn
MWRA	CW	\$4,786,700	The MWRA has three remote headworks - Chelsea Creek, Columbus Park, and Ward Street - which were built and placed into operation in the 1960's. All wastewater flows from the MWRA Northern Service Area, are collected at the remote headworks, and then sent to the Deer Island WWTP. Preliminary treatment and flow control are performed at the remote headworks facilities. This project addresses aging infrastructure and will improve operational reliability by replacing all mechanical, electrical, heating, ventilation, and air conditioning, plumbing, and equipment at all three facilities.	0.00%
MWRA	CW	\$3,759,927	After extensive alternative analysis and pilot testing, the MWRA has determined that disk filter technology is the best feasible alternative for meeting the current and upcoming discharge phosphorous concentration limits at the WWTP in the Town of Clinton. This project is for the installation of the full-scale disk filter phosphorous removal system at the WWTP. This will help ensure that NPDES discharge permit limits are met.	0.00%
MWRA	DW	\$4,045,484	The Southern Extra High service area has been identified as being deficient in distribution storage and lacking redundant distribution pipelines. Correction of these deficiencies was a majority priority under the MWRA's 2006 and 2013 Water System Master plans due to the potential public health threat that could result from a failure in this single transmission main. The purpose of this project is to correct such deficiencies.	0.00%
MWRA	DW	\$319,493	This project is for the construction of a 20million-gallon potable water storage tank in the Town of Stoneham at its terminal reservoir. The project will provide improved storage (16-20 million gallons); provide surge relief, protecting MWRA and community mains; allow for more efficient use of the existing MWRA distribution system; and, provide emergency backup to 21 communities in the Northern Intermediate High and Northern High systems.	0.00%

Borrower	Program	Amount to be Financed	Project Description	Percentage of Loan Drawn
MWRA	DW	\$28,249,352	This project is for the construction of an emergency pump station to pump water from the Wachusett Aqueduct to the Carroll Water Treatment Plant (CWTP). The pump station will provide redundancy in the event of failure or intake at the Cosgrove Tunnel. There will also be inspection and rehabilitation of the Cosgrove Tunnel. The pump station will be able to deliver 240 million gallons per day of raw water to the CWTP during a planned or emergency shutdown of the Cosgrove Tunnel. This flow rate represents the full water demand from CWTP during the fall, winter, and spring low-flow seasons. It also mitigates potential disruption of service to Northborough, Southborough, Marlborough, and Westborough State Hospital.	0.00%
Medway	CW	\$500,000	This project developed a town-wide integrated water resource management plan (IWRMP). The IWRMP allowed the town to proactively plan, fund, and implement necessary capital improvements and/or administrative practices. These proactive measures ultimately benefited the town's water treatment & distribution system, wastewater collection and treatment system, and stormwater management system.	90.59%
MFN Regional Wastewater District	CW	\$27,070,950	From 1986 to 2010, the Town of Mansfield disposed of grit and sludge from the Mansfield, Foxborough, Norton Water Pollution Control Facility (WPCF) at its Fruit Street Landfill site. After 2010, grit and sludge were being disposed of off-site. The district capped and closed the landfill site in accordance with applicable MassDEP regulations. Properly capping the landfill reduced leachate generation, reduced odors, and reduced potential stormwater runoff contamination. The project included the construction for expanding and upgrading the WPCF so that the district could operate at 4.14 MGD capacity and achieve the NPDES limits.	85.76%
Montague	CW	\$1,583,047	The main objective of the Montague Pumping Station Replacement Project was to mitigate the potential environmental impacts and make the town's wastewater infrastructure safer and more reliable. All eight of the town's wastewater pumping stations, some of which dated back to 1962, were replaced. Mechanical components of the pumping stations were beyond their useful life and replacement was the only option. Replacing the pumping stations improved operator safety by eliminating confined space entry. Electrical efficiency was improved by using VFDs, efficient motors and smart controls. Monitoring was improved through connection to the SCADA system at the wastewater plant. Operating costs were also reduced.	100.00%
Nantucket	CW	\$8,472,975	In 2009, the Surfside WWTF underwent major renovation including a treatment capacity upgrade from 2.24 MGD to 3.5 MGD (7.7 MGD peak), rehabilitation and expansion of	37.34%

Borrower	Program	Amount to be Financed	Project Description	Percentage of Loan Drawn
			groundwater disposal beds, and modifications to provide for higher nitrogen removal capacity. This project proposes further enhancements to both equipment operating procedures for providing the following improvements: 1) Reliability: corrosion control, enhanced influent screening to preserve Membrane Bioreactors (MBRs), MBR inspection and replacement, instrumentation and SCADA improvements: 2) Energy Efficiency: sludge blower cycling, piping modifications, odor control fan VFD, and MBR optimization; 3) Capacity: blower addition, nitrified recycle system.	
Nantucket	CW	\$14,101,765	The Shimmo and PLUS Needs Areas are two of the highest rated needs areas. On-site wastewater systems, the leading cause of nutrient enrichment/degradation of water resources, are present in those areas. The project's purpose is to collect, treat and discharge the wastewater from these two adjacent needs areas at the town's Surfside WWTF, which is based on the 2014 MassDEP-approved CWMP update. Both needs areas are within the Nantucket Harbor Watershed and contribute to the nutrient load in the Harbor via septic systems per the Massachusetts Estuaries Program reports.	42.27%
New Bedford	CW	\$1,000,000	The city is facing many challenges over the next several years related to regulatory compliance associated with stormwater, NPDES permitting, and the EPA's Administrative Order (AO). To effectively plan and manage these requirements, the city implemented an integrated wastewater and stormwater management plan. This plan developed a comprehensive approach to managing regulatory and AO requirements in a fiscally responsible manner while meeting the needs of the community, the EPA, and MassDEP. The Supplemental Integrated Wastewater and Stormwater Plan was developed to support ongoing planning efforts in the development of an integrated wastewater and stormwater management plan. Those efforts were necessary to maintain compliance with the AO.	86.50%

Borrower	Program	Amount to be Financed	Project Description	Percentage of Loan Drawn
Northampton	CW	\$86,222	This project disinfected the Spring and Clark Street well stations by constructing chlorination facilities at each pump station; implementing modern flow control by installing new butterfly flow control valves and magnetic flowmeters on the discharge piping; and removing and replacing well components.	84.74%
Norwood	CW	\$414,356	The objective of this project is to perform comprehensive sewer rehabilitation in portions of the underdrain area in Norwood to eliminate exfiltration of sanitary sewage into the adjacent stormwater system that ultimately discharges to Meadowbrook (a tributary of the Neponset River) and the Neponset River. Work will be performed in the underdrain area in accordance with the town's Underdrain Control Plan as revised on July 25, 2014.	87.64%
Quincy	CW	\$3,634,026	The Quincy Point Pump Station, built in 1971 and renovated in 1985, is one of the largest owned and operated by the City of Quincy. The purpose of this project was to address aging infrastructure and improve reliability and energy efficiency of the facility. The work included replacing pumps, the odor control unit, the standby generator, HVAC and plumbing., VFDs were added. Sluice gates, electrical and lighting upgrades, and structural improvements were made. It included the replacement of the air release valves and provided corrosion control for the 20-inch ductile iron force main. The existing underground fuel-storage tank was also removed.	97.18%
Revere	CW	\$1,500,000	The Phase VII Field Investigations and IDDE was vital for the city to plan and assess wastewater and stormwater systems. The field investigations included IDDE, closed circuit television inspection of drains and sewers, dye testing, smoke testing, and private building inspections. The deficiencies discovered in the system during the investigations will be addressed and corrected by the city in future construction projects.	92.00%
Revere	CW	\$850,000	The illicit connections and sump pump detection program was important for the city's efforts to remove inflow from the sanitary sewer system. This program continued the inspections of private homes and businesses so that sources of inflow from, for example sump pumps, roof leaders, roof drains, driveway drains, and yard drains could be identified.	90.29%

Borrower	Program	Amount to be Financed	Project Description	Percentage of Loan Drawn
Revere	DW	\$250,000	This project will update the city's geographic information system (GIS) for implementation of the Automatic Meter Reading (AMR) program. This GIS update allows for an efficient digital tracking system to be used during planning and implementation of the program. It will also facilitate the future management of the water utility. In addition, the project will implement a public education program to encourage water conservation, improve customer service and educate the public about the new AMR program.	62.00%
Saugus	CW	\$3,197,219	This project involved the rehabilitation of pipelines, manholes, and the removal of private inflow sources to eliminate I/I from the sewer system. The project aimed to significantly reduce or eliminate sewer system overflows from occurring at the Lincoln Avenue Pumping Station. Approximately 34,000 feet of 8-inch and 12-inch pipe and 1,500 feet of 15-inch pipe was rehabilitated using CIP pipe lining. Approximately 865 sewer services and 222 manholes were lined as part of the project. The replacement of the existing Morris Place pump station and improvements to the Bristol Street pump station was completed. The equipment within many of the town's wastewater pump stations was operating beyond its useful life and exhibited signs of failure in some cases. Replacing the existing Morris Place Pump Station was required due to the poor structural conditions, the need to restore useful life and the station's proximity to environmental receptors. Improvements to the Bristow Street Pump Station were required to restore the useful life of the station, improve operator safety, alleviate flooding concerns and improve system reliability.	79.02%
Shrewsbury	DW	\$12,074,031	A new manganese treatment facility at the existing Home Farm WTF in Shrewsbury was constructed. The project aimed to reduce the manganese levels in the town's finished water. The project will help the town comply with EPA and the Office of Research and Standards Guidelines (ORSG) manganese regulations going forward.	78.88%
Taunton	CW	\$3,927,054	New drains to facilitate sump pump removal are to be installed. Improvements and repairs to the existing sewer and stormwater systems are to be made. The objective of this project is to further reduce wastewater-related water pollution to the Taunton River and other waterways by removing I/I from the sanitary collection system to reduce and eliminate CSOs. This project will focus primarily on installing drains necessary to re-route private inflow sources (sump pumps and roof leaders) away from sanitary sewers. In addition, work to separate combination manholes will continue to reduce the potential for infiltration to enter the sewer system.	72.83%

Borrower	Program	Amount to be Financed	Project Description	Percentage of Loan Drawn
Upper Blackstone Water Pollution Abatement District (UBWPAD)	CW	\$8,842,079	UBWPAD is currently under Administrative Order on Consent (AOC) with the EPA to come comply with the 2012 NPDES permit limits for total nitrogen and total phosphorus levels. The construction project would upgrade the treatment facility to meet these nutrient limits, including the construction of a tertiary phosphorus removal system, secondary system improvements, sludge handling and chemical system improvements. There are also to be numerous ancillary systems and site improvements.	78.84%
Uxbridge	CW	\$8,093,960	The Uxbridge WWTF upgrade will provide required improvements to the existing WWTF to allow it to meet its new NPDES permit. The facility cannot currently meet the conditions of its permit with its existing infrastructure. The facility is currently under a time-related Order of Consent, which provides a schedule for the facility to achieve full compliance with its NPDES permit.	72.48%

# **Glossary of Terms**

Term	Acronym	Description
Capacity, Management, Operations, and Maintenance	СМОМ	The CMOM planning framework covers operation and maintenance (O&M) planning, capacity assessment and assurance, capital improvement planning, and financial management planning. CMOM helps shift maintenance activities from "reactive" to "predictive", enabling the municipal wastewater utility operators to reduce regulatory noncompliance.
Combined Sewer Overflow	CSO	Combined sewer systems are sewers that are designed to collect rainwater runoff, domestic sewage, and industrial wastewater in the same pipe. During storm events, the combined sewer systems can reach capacity and the excess discharge overflows into surrounding waters, creating a CSO. The elimination of CSO's is an EPA and state priority goal that will reduce the amount of untreated wastewater that is released into the local environment.
Comprehensive Wastewater Management Plan	CWMP	A plan that provides a comprehensive strategy for addressing wastewater treatment and disposal issues in a city or town.

Term	Acronym	Description
Drinking Water Infrastructure Improvements	-	Many of the drinking water projects being financed in Series 21 relate to upgrades or replacement of critical drinking water infrastructure components, such as pipes and storage tanks. Upgrading these components reduces the amount of water that is lost in the system, which reduces the amount of energy needed to pump additional water to citizens, and improves water quality.
Illicit Discharge Detection and Elimination Program	IDDE	Illicit discharges are defined as a storm drain that has measurable flow containing pollutants and/or pathogens during dry weather. These dry weather flows indicate that a direct discharge, rather than stormwater, is the source. Local knowledge and available resources can play a significant role in determining how to detect and eliminate these illicit discharges. The program helps communities systematically understand and characterize their stream, conveyance, and storm sewer infrastructure systems and remove identified illicit discharges.
Inflow and Infiltration	I/I	I/I is a term used for when groundwater or stormwater enters a dedicated wastewater or sanitary sewer system either by direct connections or by cracks or leaks in the sewer pipes. I/I increases the flow to the sewage treatment plant and can lead to backups or overflows of the system.
Integrated Municipal Stormwater and Wastewater Resource Management Plan	IMSWRMP	Integrated planning will assist municipalities along their critical path to achieving the human health and water quality objectives of the Clean Water Act. Integrated plans identify strategies and efficiencies to meet requirements that arise from distinct wastewater and stormwater programs, including how best to make capital investments.
Long Term Control Plan	LTCP	Long term control plans are intended to identify a strategy and methods that will result in the elimination of CSO.
National Pollutant Discharge Elimination System	NPDES	As authorized by the Clean Water Act, the NPDES Permit Program controls water pollution by limiting the amount of pollutants wastewater treatment facilities can discharge. NPDES permits also include requirements for monitoring and reporting as well as other provisions to protect the public health.
Sanitary Sewer Evaluation Survey	SSES	Sanitary Sewer Evaluation Survey is the critical first step in a Sewer System Evaluation and Management (SSEM) program, which includes project management/coordination of flow monitoring, sewer system evaluation, field survey, system mapping, and long-term maintenance management programs. Most local agencies have laws or ordinances that require all publicly and privately owned and operated sanitary sewer collection and transmission systems to complete an SSES by a stipulated time. In many cases, the SSES is conducted in compliance with guidelines based on U.S. EPA's Sewer System Infrastructure Analysis.
Sanitary Sewer Overflow	SSO	Sanitary sewer overflow is a condition in which untreated sewage is discharged from a sanitary sewer into the environment prior to reaching sewage treatment facilities. The elimination of SSO's reduces the amount of untreated wastewater that is released into the local environment.

Term	Acronym	Description
Secondary Treatment	-	Secondary treatment at a wastewater treatment plant is designed to breakdown the biological content contained in the sewage. The treatment involves physical phase separation to remove settleable solids and a biological process to remove dissolved and suspended organic compounds.
Tertiary Treatment	-	Tertiary treatment is an advanced treatment process, following secondary treatment of waste water, that produces high-quality water. Tertiary treatment includes removal of nutrients such as phosphorus and nitrogen and practically all suspended and organic matter from waste water.
Title 5 Project	-	A community septic management project to assist eligible homeowners to upgrade failing septic systems and otherwise to comply with the requirements of 310 CMR 15.00, Massachusetts regulations governing the design, installation, inspection and maintenance of onsite wastewater systems
Total Daily Maximum Load	TMDL	A Total Maximum Daily Load is a regulatory term in the U.S. Clean Water Act, describing a value of the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards.
Wastewater Treatment Facility or Wastewater Treatment Plant	WWTF or WWTP	The WWTF/WWTP receives all the sewage from the town or district and treats the water before releasing it back into the environment in accordance with a NPDES permit.
Water Treatment Facility	WTF	These facilities treat public drinking water before it goes to the public for consumption and are governed by strict state and federal regulations.

### APPENDIX C - SUMMARY OF CERTAIN DOCUMENTS

The following are summaries of certain provisions of the Master Trust Agreement and the Financing Agreements. Such summaries do not purport to be complete and reference should be made to each of these documents individually for full and complete statements of such and all provisions therein.

## **Summary of Certain Provisions of the Master Trust Agreement**

## **Trust Agreement to Constitute Contract**

The Master Trust Agreement constitutes a contract between the Trust, the Fiduciaries and the Registered Owners from time to time of the Bonds, and the pledge made in the Master Trust Agreement and the covenants and agreements therein set forth to be performed by or on behalf of the Trust shall be for the equal benefit, protection and security of the Registered Owners of any and all of the Bonds, all of which, regardless of the time or times of their issue or maturity, shall be of equal rank without preference, priority or distinction of any of the Bonds over any other thereof, except as otherwise expressly provided in or permitted by the Master Trust Agreement.

### **Conditions Precedent to the Delivery of Additional Bonds**

One or more Series of Additional Bonds may be issued under the Master Trust Agreement for any purpose of the Trust, including without limitation funding Projects or financing Loans under the Clean Water Program or Drinking Water Program contemplated by the Act, making deposits to one or more Funds, paying Costs of Issuance or refunding Outstanding Bonds, Prior Bonds or other obligations of the Trust.

A Series of Additional Bonds shall be executed by the Trust and delivered to the Master Trustee and by it authenticated and delivered to or upon the order of an Authorized Officer, but only upon receipt by the Master Trustee of certain documents and certificates under the Master Trust Indenture including without limitation:

- (1) If the Additional Bonds are to be issued as Senior Bonds, a certificate of an Authorized Officer of the Trust showing that the projected Program Revenues for the current and each future Fiscal Year are not projected to be less than 105% of the sum of (i) Aggregate Debt Service on Senior Bonds, (ii) Scheduled Hedge Payments under Parity Hedge Agreements and (iii) Reimbursement Obligations secured on a parity with the Senior Bonds for the then current and future Fiscal Year with respect to all Senior Bonds Outstanding including the proposed Additional Senior Bonds; or
- (2) If the Additional Bonds are to be issued as Subordinate Bonds, a certificate of an Authorized Officer of the Trust showing that the Program Revenues for the current and each future Fiscal Year are projected to be not less than 100% of the sum of (i) Aggregate Debt Service on Subordinate Bonds, (ii) Scheduled Hedge Payments under Parity Hedge Agreements and (iii) Reimbursement Obligations secured on a parity with the Subordinate Bonds in the then current or any future Fiscal Year with respect to all Bonds Outstanding including the proposed Additional Subordinate Bonds.

# Special Conditions Precedent to the Delivery of Refunding Bonds

One or more Series of Refunding Bonds may be issued under the Master Trust Agreement for the purpose of refunding all or any part of the Bonds of one or more Series Outstanding or all or any part of any Series of Prior Bonds.

A Series of Refunding Bonds shall be executed by the Trust and delivered to the Master Trustee and by it authenticated and delivered to or upon the order of an Authorized Officer, but only upon receipt by the Master Trustee of certain documents and certificates under the Master Trust Agreement, including without limitation:

(1) A certificate of an Authorized Officer setting forth the Aggregate Debt Service for each Fiscal Year in which Bonds are or will be Outstanding (a) computed immediately prior to the delivery of such Refunding Bonds and (b) computed immediately after the delivery of such Refunding Bonds, and showing either that (x) the Aggregate Debt Service in each Fiscal Year in which Bonds will be Outstanding as computed in (b) of this

paragraph will not be greater than the Aggregate Debt Service in each such Fiscal Year as computed in (a) of this paragraph or (y) the maximum annual Aggregate Debt Service for all such Fiscal Years as computed in (b) of this paragraph will not be greater than the maximum annual Aggregate Debt Service for all such Fiscal Years as computed in (a) of this paragraph, provided that, in lieu of such certificate, the Authorized Officer may deliver to the Master Trustee either (A) a certificate satisfying the conditions of under the heading "Conditions Precedent to Delivery of Additional Bonds" treating the Refunding Bonds to be issued as Additional Senior Bonds thereunder (if such Refunding Bonds are being issued as Senior Bonds), or (B) a certificate satisfying the conditions of under the heading "Conditions Precedent to Delivery of Additional Bonds" treating the Refunding Bonds to be issued as Additional Subordinate Bonds thereunder (if such Refunding Bonds are being issued as Subordinate Bonds), or (C) a Rating Confirmation; provided that if Refunding Bonds are being issued to refund Prior Bonds, Aggregate Debt Service for purposes of clause (a) shall include Debt Service on the Prior Bonds.

### **Bond Anticipation Notes**

Whenever the Trust shall authorize the issuance of a Series of Bonds, the Trust may by the Master Trust Agreement, to the extent authorized by the Act or any other law, issue notes (and renewals thereof) in anticipation of such Series. The principal of and interest on notes authorized under the Master Trust Agreement and renewals thereof shall be payable from any moneys of the Trust lawfully available therefor, from the proceeds of such notes or from the proceeds of the sale of the Series of Bonds in anticipation of which such notes are issued. The proceeds of such Bonds may be pledged for the payment of the principal of and interest on such notes. Notes issued in anticipation of a Series of Senior Bonds may be paid from the proceeds of the sale of a Series of Subordinate Bonds, if the Trust so determines, and the proceeds of such Subordinate Bonds may be pledged for the payment of the principal of and interest on such notes. The Trust may also pledge the Trust Estate to the payment of bond anticipation notes to the extent and in the manner provided under the heading "Creation of Liens; Other Indebtedness," provided that prior to the issuance of any notes secured by such a pledge, the Trust shall (i) certify to the Master Trustee that it reasonably expects that all applicable requirements of the Master Trust Agreement pertaining to the issuance of the Series of Bonds in anticipation of which such notes are to be issued can be satisfied or (ii) deliver a Rating Confirmation to the Master Trustee. For purposes of satisfying the requirements of the Master Trust Agreement and determining the annual amount payable in respect of the Bonds intended to secure the bond anticipation notes, such Bonds shall be treated on the date of calculation as if (i) from the date of issuance thereof, the Trust will be required to pay equal installments of Debt Service on such Bonds over a period extending from the due date thereof through the 30th anniversary of the issue date of such Bonds and (ii) interest will accrue at a rate equal to the rate as specified in the Supplemental Trust Agreement prepared for such bond anticipation notes, payable semi-annually.

#### Creation of Liens: Other Indebtedness

Except as otherwise expressly provided in this Section, the Trust shall not issue any bonds, notes or other evidences of indebtedness, other than the Bonds, or enter into any Qualified Hedge Agreement, secured by a pledge of or other lien on the Trust Estate held or set aside by the Trust or by the Master Trustee under the Master Trust Agreement, and shall not otherwise create or cause to be created any lien or charge on such Trust Estate.

Notwithstanding anything in the Master Trust Agreement to the contrary the Trust may at any time or from time to time issue notes or other evidences of indebtedness (and renewals thereof) in anticipation of Bonds to the extent and in the manner provided under the heading "Bond Anticipation Notes," which notes, if so determined by the Trust and to the extent permitted by law, may be payable out of, or secured by a pledge of, the Trust Estate, provided that such payment or pledge shall in all respects be subordinate to the provisions of the Master Trust Agreement and the pledge created by the Master Trust Agreement for the benefit of the related Senior Bonds Outstanding under the Master Trust Agreement, as applicable.

The Trust may issue bonds (other than Additional Bonds or Refunding Bonds), notes or other evidences of indebtedness, and may enter into Qualified Hedge Agreements, which are payable out of, or secured by a pledge of, the Trust Estate, provided that such payment or pledge, except as otherwise provided under the headings "Credit Enhancement/Liquidity Facilities" or "Qualified Hedge Agreements" of the Master Trust Agreement, shall in all respects be subordinate to the provisions of the Master Trust Agreement and the pledge created thereby for the benefit of the Senior Bonds and Subordinate Bonds Outstanding.

Nothing in this Section or the Master Trust Agreement shall prevent the Trust from issuing bonds, notes or other evidences of indebtedness or entering into any Qualified Hedge Agreement, which are payable out of, or secured by a pledge of, the Trust Estate to be derived on and after such date as the pledge of the Trust Estate created by the Master Trust Agreement has been discharged as provided under the heading "Defeasance" or moneys which have been released from the lien and pledge of the Master Trust Agreement pursuant to the section of the Master Trust Agreement titled "Transfer Out of the Master Trust Agreement."

## **Credit Enhancement/Liquidity Facilities**

In connection with any Series of Bonds issued or to be issued under the Master Trust Agreement, or any Qualified Hedge Agreement, the Trust may obtain or cause to be obtained Credit Enhancement or a Liquidity Facility providing for the payment of all or a portion of the principal, premium, or interest due or to become due on such Bonds or the Qualified Hedge Payments payable by the Trust on such Qualified Hedge Agreement or providing for the purchase of such Bonds or a portion thereof by the issuer of any such Credit Enhancement or Liquidity Facility. In connection therewith the Trust may enter into such agreements with the issuer of such Credit Enhancement or Liquidity Facility providing for, inter alia: (1) the payment of fees, charges and expenses of the issuer in connection with such Credit Enhancement or Liquidity Facility which fees, charges and expenses may be Costs of Issuance or Administrative Expenses; and (2) the terms and conditions of such Credit Enhancement or Liquidity Facility and the Series of Bonds affected thereby.

The Trust may secure any Credit Enhancement or Liquidity Facility pertaining to a Series of Bonds secured thereby by an agreement providing for the purchase of such Bonds with such adjustments to the rate of interest, method of determining interest, maturity, or redemption provisions as specified in the applicable Supplemental Trust Agreement. The Trust may also agree with the issuer of any Credit Enhancement or Liquidity Facility to reimburse such issuer from amounts held under the Master Trust Agreement or otherwise legally available to the Trust for amounts paid under the terms of such Credit Enhancement or Liquidity Facility together with interest thereon (herein referred to as a "Reimbursement Obligation"). Any Reimbursement Obligation may be secured by a lien on the Trust Estate on a parity with the lien created by the Master Trust Agreement for the benefit of the related Series of Senior Bonds Outstanding or Subordinate Bonds Outstanding, as applicable, under the Master Trust Agreement and, to the extent provided under the heading "Qualified Hedge Agreement," for the benefit of the Hedge Provider of any Parity Hedge Agreement under the Master Trust Agreement, subject only to the provisions of the Master Trust Agreement permitting the application of the Trust Estate for the purposes and on the terms and conditions set forth in the Master Trust Agreement and in the applicable Supplemental Trust Agreement. To the extent provided in the applicable Supplemental Trust Agreement, upon the payment of amounts under any Credit Enhancement which is secured by a lien on the Trust Estate on a parity with the lien created by the Master Trust Agreement for the related Series of Senior Bonds or Subordinate Bonds, any Reimbursement Obligation arising therefrom may be deemed a Senior Bond Outstanding or Subordinate Bond Outstanding, under the Master Trust Agreement, as applicable, or, in the case of any Reimbursement Obligation arising from Credit Enhancement on any Parity Hedge Agreement, a Scheduled Hedge Payment thereon payable in either case from the Senior Debt Service Fund on a parity with the Senior Bonds or the Subordinate Debt Service Fund on a parity with the Subordinate Bonds.

### **Qualified Hedge Agreements**

The Trust may from time to time enter into Qualified Hedge Agreements with a Hedge Provider with respect to all or a portion of the Bonds of any Series Outstanding under the Master Trust Agreement. To the extent provided in a Supplemental Trust Agreement, the obligations of the Trust under a Qualified Hedge Agreement to make all or any portion of the Scheduled Hedge Payments required to be made by the Trust thereunder may be secured by a pledge of the Trust Estate on a parity with the pledge thereof created under the Master Trust Agreement for the benefit of the Owners of the related Series of Senior Bonds or Subordinate Bonds. Except as otherwise provided in the applicable Supplemental Trust Agreement, if such Parity Hedge Agreement is entered into with respect to Senior Bonds, all Scheduled Hedge Payments to be made by the Trust under any Parity Hedge Agreement shall be payable from amounts deposited in the Senior Debt Service Fund as provided in the Master Trust Agreement on a parity with all other payments therefrom with respect to the Senior Bonds or, if the Parity Hedge Agreement is entered into with respect to Subordinate Bonds, the Subordinate Debt Service Fund as provided in the Master Trust Agreement on a parity with all other payments therefrom with respect to the Subordinate Bonds. The obligations of the Trust to make all or any portion of any Termination Hedge Payments under any Parity Hedge Agreement, and the obligation of the Trust to make any Qualified Hedge Payments under any other Qualified Hedge Agreement, may be secured by a pledge of the Trust Estate, provided that such pledge shall in all respects be subordinate to the pledge created by the Master Trust

Agreement for the benefit of the related Senior Bonds or Subordinate Bonds Outstanding under the Master Trust Agreement.

Upon the issuance of any Variable Rate Bonds under the Master Trust Agreement which are subject to a Fixed Rate Hedge Agreement, an Authorized Officer shall deliver to the Master Trustee a certificate setting forth the fixed interest rate (the "Fixed Hedge Rate") payable by the Trust during the term of such Fixed Rate Hedge Agreement on a notional amount of such Variable Rate Bonds.

Upon the issuance of any Fixed Rate Bonds under the Master Trust Agreement which are subject to a Variable Rate Qualified Hedge Agreement, an Authorized Officer shall deliver to the Master Trustee a certificate setting forth the interest rate (the "Assumed Hedge Rate") which such Authorized Officer reasonably determines will be the average interest rate which will be payable during the term of such Variable Rate Hedge Agreement then in effect on a notional amount of such Fixed Rate Bonds.

## The Pledge Effected by the Master Trust Agreement

The Bonds are special obligations of the Trust secured solely as set forth in the Master Trust Agreement. As security for the payment of the principal and Redemption Price of and interest on Senior Bonds, for the payment of Reimbursement Obligations (to the extent provided in the Master Trust Agreement) and for the payment of Scheduled Hedge Payments payable by the Trust on any Parity Hedge Agreement (to the extent provided in the Master Trust Agreement), in either case entered into with respect to Senior Bonds, subject only to the provisions of the Master Trust Agreement permitting the application thereof for the purposes and on the terms and conditions set forth in the Master Trust Agreement, the Trust pledges (i) the Revenues and all rights to receive the same, whether existing or coming into existence and whether held at the time of the execution of Master Trust Agreement or thereafter acquired and including any proceeds thereof, (ii) all rights and interest of the Trust in and to all Loans and Financing Agreements therefor (other than the Trust's rights of indemnification and reimbursement and its right to receive Administrative Fees and Origination Fees thereunder) or otherwise incident thereto and proceeds thereof, (iii) all rights and interest of the Trust under Revenue producing contracts (other than the Master Funding Agreement, any Grant Agreements and the Commonwealth Assistance Contract) and all rights and interest of the Trust incident thereto and proceeds thereof, (iv) all moneys, securities and any investment earnings with respect thereto in all Funds established by or pursuant to the Master Trust Agreement (except for the Subordinate Debt Service Fund, the Subordinate Debt Service Reserve Fund, the Subordinate Redemption Fund, the Rebate Fund and the Administrative Expense Fund), (v) all Scheduled Hedge Payments and all Termination Hedge Payments payable to the Trust by a Hedge Provider pursuant to a Qualified Hedge Agreement relating to Senior Bonds, and (vi) subject to the lien of the Program Resolution and the Prior Bond Resolutions, the Commonwealth Assistance Contract, whether any of the foregoing was existing at the time of the execution of the Master Trust Agreement or is thereafter acquired (collectively, the "Senior Trust Estate").

Subject only to the foregoing prior pledge created for the payment of the Senior Bonds, and on the terms and conditions set forth in the Master Trust Agreement with respect to such prior pledge, as security for the payment of the principal and Redemption Price of and interest on Subordinate Bonds, for the payment of Reimbursement Obligations (to the extent provided in the Master Trust Agreement) and for the payment of Scheduled Hedge Payments payable by the Trust on any Parity Hedge Agreement (to the extent provided in the Master Trust Agreement), in either case entered into with respect to Subordinate Bonds, subject only to the provisions of the Master Trust Agreement permitting the application thereof for the purposes and on the terms and conditions set forth in the Master Trust Agreement, the Trust pledges (i) the Revenues and all rights to receive the same, whether existing or coming into existence and whether held or at the time of the execution of the Master Trust Agreement or thereafter acquired and including any proceeds thereof, (ii) all rights and interest of the Trust in and to all Loans and Financing Agreements therefor (other than the Trust's rights of indemnification and reimbursement and its right to receive Administrative Fees and Origination Fees thereunder) or otherwise incident thereto and proceeds thereof, (iii) all rights and interest of the Trust under Revenue producing contracts (other than the Master Funding Agreement, any Grant Agreements and the Commonwealth Assistance Contract) and all rights and interest of the Trust incident thereto and proceeds thereof, (iv) all moneys, securities and any investment earnings with respect thereto in all Funds established by or pursuant to the Master Trust Agreement (except for the Senior Debt Service Fund, the Senior Debt Service Reserve Fund, the Senior Redemption Fund, the Rebate Fund, and the Administrative Expense Fund), (v) all Scheduled Hedge Payments and all Termination Hedge Payments payable to the Trust by a Hedge Provider

pursuant to a Qualified Hedge Agreement relating to Subordinate Bonds, and (vi) subject to the lien of the Program Resolution and the Prior Bond Resolutions, the Commonwealth Assistance Contract, whether any of the foregoing was existing at the time of the execution of the Master Trust Agreement or is thereafter acquired (collectively, the "Subordinate Trust Estate, and together with the Senior Trust Estate, the "Trust Estate").

Notwithstanding anything to the contrary in the section entitled "The Pledge Effected by the Master Trust Agreement", the pledge of any Revenues and right, title and interest in Loans and Financial Agreements related to Prior Loans is expressly subject and subordinate to the prior pledge and lien granted by the Trust for the benefit of the Owners of the applicable Prior Bonds under the applicable Prior Bond Resolutions, including without limitation the Owners of applicable Refunding Prior Bonds.

#### **Establishment of Funds**

The Master Trust Agreement establishes the following Funds to be held by the Master Trustee:

- (1) Project Fund
  - (a) Cost of Issuance Account
- (2) Revenue Fund
- (3) Senior Debt Service Fund
- (4) Subordinate Debt Service Fund
- (5) Senior Debt Service Reserve Fund
  - (a) Clean Water Account
  - (b) Drinking Water Account
- (6) Subordinate Debt Service Reserve Fund
  - (a) Clean Water Account
  - (b) Drinking Water Account
- (7) Senior Redemption Fund
- (8) Subordinate Redemption Fund
- (9) Clean Water Equity Fund
  - (a) Interim Loan Account
- (10) Drinking Water Equity Fund
  - (a) Interim Loan Account
- (11) Administrative Expense Fund
- (12) Rebate Fund
- (13) Contract Assistance Fund
  - (a) Clean Water Account
  - (b) Drinking Water Account

In addition, the Trust may by Supplemental Trust Agreement or by a certificate of an Authorized Officer delivered to the Master Trustee create one or more other funds and accounts to be held and maintained under the Master Trust Agreement as provided in such Supplemental Trust Agreement or certificate.

## **Project Fund**

The Trust shall deposit in the Project Fund such amounts as shall be stated in the applicable Supplemental Trust Agreement, and subject to final allocation as set forth in a certificate of an Authorized Officer. Moneys in the

Project Fund shall be disbursed by the Master Trustee for Costs of the applicable Projects or the refinancing of such Costs in accordance with the Act, the Clean Water Act, the Drinking Water Act, as applicable, the DEP Regulations and the applicable Financing Agreements and Regulatory Agreements. The Trust shall maintain records as to the amounts allocable to each Borrower and shall only requisition moneys for the account of a particular Borrower to the extent set forth in the applicable Financing Agreement.

The Trust may direct the transfer of moneys between accounts, if any, in the Project Fund pursuant to a written certificate of an Authorized Officer.

When all Costs of a particular Project to be paid from the Project Fund have been so paid, as evidenced by a certificate of an Authorized Officer of the Trust delivered to the Master Trustee, or when otherwise directed in the Master Trust Agreement, any amount remaining unexpended in the Project Fund allocable to such Project shall be either (1) applied to the prepayment of the applicable Loan and transferred by the Master Trustee to either (i) the Senior Redemption Fund or Subordinate Redemption Fund or (ii) applied to Costs of other Projects to the extent permitted under the Clean Water Act or the Drinking Water Act, as applicable, and the DEP Regulations (upon delivery to the Master Trustee of an original executed counterpart of an amendment or supplement to the applicable Financing Agreement and Regulatory Agreement), or (2) applied as a credit against any Borrower Payments then or thereafter due under the applicable Financing Agreement and transferred by the Master Trustee to the Revenue Fund or the Senior Debt Service Fund or Subordinate Debt Service Fund (as directed by the Trust), or (3) any combination of the foregoing, as directed in a certificate of an Authorized Officer of the Trust delivered to the Master Trustee. Notwithstanding the foregoing provisions of this Paragraph, no moneys remaining in a Project Fund upon final disbursement therefrom for Costs of the applicable Project may be transferred by the Master Trustee to the Revenue Fund or to the Senior Debt Service Fund or Subordinate Debt Service Fund unless the written direction of an Authorized Officer of the Trust is accompanied by an opinion of Bond Counsel to the effect that such transfer will not adversely affect the exclusion from gross income of interest on any Bonds Outstanding for federal income tax purposes.

Notwithstanding anything in this Section to the contrary, upon the written direction of an Authorized Officer of the Trust, the Master Trustee shall transfer the amount on deposit in the Project Fund allocable to a particular Borrower to the Senior Debt Service Fund or Subordinate Debt Service Fund, as applicable, any amounts necessary for the payment of any Borrower Payments due and unpaid on the related Loan or any other outstanding Loan to the same Borrower to the extent that at such time no moneys are available therefor in any other Funds and Accounts established under the Master Trust Agreement or the applicable Financing Agreement.

#### **Revenue Fund**

Except as otherwise provided in the Master Trust Agreement, all Program Revenues, including without limitation all Borrower Payments and Contract Assistance Payments shall promptly upon receipt by the Trust be deposited in the Revenue Fund. The Master Trustee shall also deposit in the Revenue Fund any amounts directed to be so deposited or transferred to such Fund under any provision of the Master Trust Agreement, and other amounts transferred to the Master Trustee in accordance with the provisions of the Master Trust Agreement, and shall hold for the account of the Revenue Fund all Loans.

On or before each Debt Service Payment Date for the Outstanding Bonds, the Master Trustee shall apply the balance on deposit in the Revenue Fund as follows and in the following order of priority, provided that, if the Trust by Supplemental Trust Agreement shall have created one or more additional funds and accounts or subaccounts within Funds and Accounts, the Trust may by Supplemental Trust Agreement modify the priority set forth in any clause of this Paragraph other than the priority of Clauses (1) through (5) of this Paragraph:

- (1) To the Senior Debt Service Fund, if and to the extent required so that the balance therein shall equal the sum of (a) all due and unpaid interest and all interest to become due on such Debt Service Payment Date on the Senior Bonds Outstanding; (b) all due and unpaid principal and all principal to become due on such Debt Service Payment Date on the Senior Bonds Outstanding; and (c) all Scheduled Hedge Payments due under Parity Hedge Agreements and Reimbursement Obligations due with respect to Senior Bonds as permitted by the Master Trust Agreement;
- (2) To the Subordinate Debt Service Fund, if and to the extent required so that the balance therein shall equal the sum of (a) all due and unpaid interest and all interest to become due on such Debt Service

Payment Date on the Subordinate Bonds Outstanding; and (b) all due and unpaid principal and all principal to become due on such Debt Service Payment Date on the Subordinate Bonds Outstanding; and (c) all Scheduled Hedge Payments due under Parity Hedge Agreements and Reimbursement Obligations due with respect to Subordinate Bonds as permitted by the Master Trust Agreement;

- (3) To the Rebate Fund, if and to the extent required so that the amount therein shall equal the Rebate Requirement, if any, as most recently calculated in accordance with the Master Trust Agreement;
- (4) To the Clean Water Account or the Drinking Water Account, as applicable, within the Senior Debt Service Reserve Fund (as directed by the Trust), to the extent and in the amount of any draws on the applicable Account theretofore made as provided in the Master Trust Agreement due to a Payment Default, but only to the extent of Program Revenues received and deposited in the Revenue Fund in satisfaction of such Payment Default;
- (5) To the Clean Water Account or the Drinking Water Account, as applicable, within the Subordinate Debt Service Reserve Fund (as directed by the Trust), to the extent and in the amount of any draws on the applicable Account theretofore made as provided in the Master Trust Agreement due to a Payment Default, but only to the extent of Program Revenues received and deposited in the Revenue Fund in satisfaction of such Payment Default;
- (6) To the Senior Redemption Fund or Subordinate Redemption Fund, as directed by an Authorized Officer of the Trust, all or any portion of the remaining balance in the Revenue Fund; and
- (7) To the Clean Water Equity Fund or the Drinking Water Equity Fund, upon the order of the Trust, all or any portion of the remaining balance in the Revenue Fund as requested in writing by the Trust, but only upon receipt by the Master Trustee of a certificate of an Authorized Officer of the Trust to the effect that following such payment expected Program Revenues and other funds available for the purpose will be sufficient to pay in the current and each subsequent Fiscal Year Aggregate Debt Service when due and all required deposits, if any, into all Funds and Accounts established and maintained under the Master Trust Agreement.

As long as no Event of Default shall have occurred and be continuing, the Master Trustee shall be entitled to rely without inquiry on a certificate of an Authorized Officer of the Trust as to the proper amounts to be deposited in the various Funds and Accounts as required by this Section. The Trust agrees to furnish the Master Trustee with such a certificate prior to each time the Master Trustee is required or directed to allocate amounts from the Revenue Fund. The Master Trustee shall retain copies of such certificates while there are any such Bonds Outstanding and shall also maintain appropriate records of the interest or other income earned on investment or deposit of all such amounts while held under the Master Trust Agreement.

Notwithstanding anything in this Section to the contrary, so long as there shall be held in the Senior Debt Service Fund an amount sufficient to fully pay all Senior Bonds Outstanding and Scheduled Hedge Payment and Reimbursement Obligations related to Senior Bonds in accordance with their terms (including principal amount or Redemption Price and interest) no deposits shall be required to be made into the Senior Debt Service Fund. Notwithstanding anything in this Section to the contrary, so long as there shall be held in the Subordinate Debt Service Fund an amount sufficient to fully pay all Subordinate Bonds Outstanding and Scheduled Hedge Payment and Reimbursement Obligations related to Subordinate Bonds in accordance with their terms (including principal amount or Redemption Price and interest) no deposits shall be required to be made into the Subordinate Debt Service Fund.

#### **Senior Debt Service Fund**

The Master Trustee shall pay out of the Senior Debt Service Fund (i) on or before each Debt Service Payment Date for a Series of Senior Bonds the amount required for the interest and principal payable on such date, (ii) on or before each redemption date for a Series of Senior Bonds, other than a redemption date on account of Sinking Fund Payments, the amount required for the payment of interest and Redemption Price on such Series of Senior Bonds then to be redeemed and (iii) on or before each Debt Service Payment Date for a Series of Senior Bonds the amount, if any, required for all Scheduled Hedge Payments payable by the Trust on such date under any Parity Hedge Agreement and any Reimbursement Obligations due with respect to such Series of Senior Bonds; provided that in each case the Trust may direct the Master Trustee to make such payments on such date prior to the due date as the Trust determines to the extent amounts are available therefor in such Fund. The Master Trustee shall apply such amounts to the payment of

such interest and principal, Scheduled Hedge Payments and Reimbursement Obligations on and after the due dates thereof. If on any Debt Service Payment Date for a Series of Senior Bonds the amount accumulated in the Senior Debt Service Fund for any of the purposes specified above calculated with respect to all Senior Bonds then Outstanding exceeds the amount required therefor, the amount of such excess shall thereupon be transferred to the Revenue Fund. The Master Trustee shall also pay out of the Senior Debt Service Fund accrued interest included in the purchase price of Senior Bonds purchased under any provision of the Master Trust Agreement or an applicable Supplemental Trust Agreement.

Amounts accumulated in the Senior Debt Service Fund with respect to any Sinking Fund Payment (together with amounts accumulated therein with respect to interest on the Senior Bonds for which such Sinking Fund Payment was established) may, and if so directed by an Authorized Officer shall, be applied by the Master Trustee prior to the 45th day preceding the due date of such Sinking Fund Payment, to (i) the purchase of Senior Bonds of the Series and maturity for which such Sinking Fund Payment was established, at prices not exceeding the applicable sinking fund Redemption Price plus interest on such Senior Bonds to the first date on which such Senior Bonds could be redeemed (or, in the case of a Sinking Fund Payment due on the maturity date, the principal amount thereof plus interest to such date), such purchases to be made in such manner as the Trust shall arrange, or (ii) the redemption of such Senior Bonds then redeemable by their terms. The applicable Redemption Price or principal amount (in the case of maturing Bonds) of any Senior Bonds so purchased or redeemed shall be deemed to constitute part of the Senior Debt Service Fund until such Sinking Fund Payment date for the purpose of calculating the amount of such Fund. As soon as practicable after the 45th day preceding the due date of any such Sinking Fund Payment, the Master Trustee shall proceed (by giving notice as provided in the Master Trust Agreement) to call for redemption on such due date Senior Bonds of the Series and maturity for which such Sinking Fund Payment was established (except in the case of Senior Bonds maturing on a Sinking Fund Payment date) in such amount as shall be necessary to complete the retirement of the principal amount of the Senior Bonds of such Series and maturity as specified for such Sinking Fund Payment in the applicable Supplemental Trust Agreement and whether or not the balance in the Senior Debt Service Fund is sufficient to pay all such Senior Bonds. The Master Trustee shall pay out of the Senior Debt Service Fund, on or before such redemption date or maturity date, the amount required for the redemption of the Senior Bonds so called for redemption or for the payment of such Senior Bonds then maturing, and such amount shall be applied to such redemption or payment.

In satisfaction, in whole or in part, of any amount required to be paid into the Senior Debt Service Fund which is attributable to a Sinking Fund Payment, there may be delivered on behalf of the Trust to the Master Trustee Senior Bonds of the Series and maturity entitled to such payment. All Senior Bonds so delivered to the Master Trustee in satisfaction of a Sinking Fund Payment shall reduce the amount thereof by the amount of the aggregate of the sinking fund Redemption Prices of such Senior Bonds.

Notwithstanding anything to the contrary contained in this Section, the Master Trustee shall not purchase or accept Senior Bonds in lieu of any Sinking Fund Payment during the period of 45 days prior to the due date of any Sinking Fund Payment.

On each Debt Service Payment Date for any Bonds Outstanding, in the event amounts on deposit in the Senior Debt Service Fund are insufficient to pay Debt Service on the Senior Bonds due on such Debt Service Payment Date, or any Scheduled Hedge Payments or Reimbursement Obligations then due with respect to Senior Bonds, the Master Trustee shall promptly transfer the amount necessary to make up such deficiency, first, from the amounts on deposit in the Senior Redemption Fund, second, from the amounts on deposit in the Senior Debt Service Reserve Fund, and third, from the amounts on deposit in the Clean Water Equity Fund (relating to any deficiencies with respect to Clean Water Obligations) or the Drinking Water Equity Fund (relating to any deficiencies with respect to Drinking Water Obligations).

### **Subordinate Debt Service Fund**

The Master Trustee shall pay out of the Subordinate Debt Service Fund (i) on or before each Debt Service Payment Date for a Series of Subordinate Bonds the amount required for the interest and principal payable on such date, (ii) on or before each redemption date for the Subordinate Bonds, other than a redemption date on account of Sinking Fund Payments, the amount required for the payment of interest and Redemption Price on such Series of Subordinate Bonds then to be redeemed and (iii) on or before each Debt Service Payment Date for a Series of Subordinate Bonds the amount, if any, required for all Scheduled Hedge Payments payable by the Trust on such date under any Parity Hedge Agreement or Reimbursement Obligations with respect to Subordinate Bonds; provided that in each case the Trust may direct the Master Trustee to make such payments on such date prior to the due date as the

Trust determines to the extent amounts are available therefor in such Fund. The Master Trustee shall apply such amounts to the payment of such interest and principal and Scheduled Hedge Payments on and after the due dates thereof. If on any Debt Service Payment Date for a Series of Subordinate Bonds the amount accumulated in the Subordinate Debt Service Fund for any of the purposes specified above calculated with respect to all Subordinate Bonds then Outstanding exceeds the amount required therefor, the amount of such excess shall thereupon be transferred to the Revenue Fund. The Master Trustee shall also pay out of the Subordinate Debt Service Fund accrued interest included in the purchase price of Subordinate Bonds purchased under any provision of the Master Trust Agreement or an applicable Supplemental Trust Agreement.

Amounts accumulated in the Subordinate Debt Service Fund with respect to any Sinking Fund Payment (together with amounts accumulated therein with respect to interest on the Subordinate Bonds for which such Sinking Fund Payment was established) may, and if so directed by an Authorized Officer shall, be applied by the Master Trustee prior to the 45th day preceding the due date of such Sinking Fund Payment, to (i) the purchase of Subordinate Bonds of the Series and maturity for which such Sinking Fund Payment was established, at prices not exceeding the applicable sinking fund Redemption Price plus interest on such Subordinate Bonds to the first date on which such Subordinate Bonds could be redeemed (or, in the case of a Sinking Fund Payment due on the maturity date, the principal amount thereof plus interest to such date), such purchases to be made in such manner as the Trust shall arrange, or (ii) the redemption of such Subordinate Bonds then redeemable by their terms. The applicable Redemption Price or principal amount (in the case of maturing Bonds) of any Subordinate Bonds so purchased or redeemed shall be deemed to constitute part of the Subordinate Debt Service Fund until such Sinking Fund Payment date for the purpose of calculating the amount of such Fund. As soon as practicable after the 45th day preceding the due date of any such Sinking Fund Payment, the Master Trustee shall proceed (by giving notice as provided in the Master Trust Agreement) to call for redemption on such due date Subordinate Bonds of the Series and maturity for which such Sinking Fund Payment was established (except in the case of Subordinate Bonds maturing on a Sinking Fund Payment date) in such amount as shall be necessary to complete the retirement of the principal amount of the Subordinate Bonds of such Series and maturity as specified for such Sinking Fund Payment in the applicable Supplemental Trust Agreement and whether or not the balance in the applicable Subordinate Debt Service Account of the Subordinate Debt Service Fund is sufficient to pay all such Subordinate Bonds. The Master Trustee shall pay out of the Subordinate Debt Service Fund, on or before such redemption date or maturity date, the amount required for the redemption of the Subordinate Bonds so called for redemption or for the payment of such Subordinate Bonds then maturing, and such amount shall be applied to such redemption or payment.

In satisfaction, in whole or in part, of any amount required to be paid into the Subordinate Debt Service Fund which is attributable to a Sinking Fund Payment, there may be delivered on behalf of the Trust to the Master Trustee Subordinate Bonds of the Series and maturity entitled to such payment. All Subordinate Bonds so delivered to the Master Trustee in satisfaction of a Sinking Fund Payment shall reduce the amount thereof by the amount of the aggregate of the sinking fund Redemption Prices of such Subordinate Bonds.

Notwithstanding anything to the contrary contained in this Section, the Master Trustee shall not purchase or accept Subordinate Bonds in lieu of any Sinking Fund Payment during the period of 45 days prior to the due date of any Sinking Fund Payment.

On each Debt Service Payment Date for any Bonds Outstanding, in the event amounts on deposit in the Subordinate Debt Service Fund are insufficient to pay Debt Service on the Subordinate Bonds due on such Debt Service Payment Date, or any Scheduled Hedge Payments or Reimbursement Obligations then due with respect to Subordinate Bonds, the Master Trustee shall promptly transfer the amount necessary to make up such deficiency, first, from the amounts on deposit in the Subordinate Redemption Fund, second, from the amounts on deposit in the Subordinate Debt Service Reserve Fund, and third, (after application of funds to deficiencies relating to the Senior Bonds) from the amounts on deposit in the Clean Water Equity Fund (relating to any deficiencies with respect to Clean Water Obligations) or the Drinking Water Equity Fund (relating to any deficiencies with respect to Drinking Water Obligations).

# **Senior Redemption Fund**

If at any time the amount on deposit and available therefor in the Senior Debt Service Fund is insufficient to pay the principal of, interest and premium, if any, on the Senior Bonds then due the Master Trustee shall withdraw from the Senior Redemption Fund and deposit in the Senior Debt Service Fund the amount necessary to meet the deficiency (other than amounts held therein for the redemption of Senior Bonds for which a notice of redemption shall have been given). Subject to the foregoing, amounts in the Senior Redemption Fund may be applied by the Trust to

the redemption of Senior Bonds in accordance with the Master Trust Agreement and the applicable Supplemental Trust Agreement or to the purchase of Senior Bonds at prices not exceeding the applicable Redemption Prices (plus accrued interest) had such Senior Bonds been redeemed (or, if not then subject to redemption, at the applicable Redemption Prices when next subject to redemption), such purchases to be paid for by the Master Trustee at such times and in such manner as arranged and directed by an Authorized Officer.

# **Subordinate Redemption Fund**

If at any time the amount on deposit and available therefor in the Subordinate Debt Service Fund is insufficient to pay the principal of, interest and premium, if any, on the Subordinate Bonds then due, the Master Trustee shall withdraw from the Subordinate Redemption Fund and deposit in the Subordinate Debt Service Fund the amount necessary to meet the deficiency (other than amounts held therein for the redemption of Subordinate Bonds for which a notice of redemption shall have been given). Subject to the foregoing, amounts in the Subordinate Redemption Fund may be applied by the Trust to the redemption of Subordinate Bonds in accordance with the Master Trust Agreement and the applicable Supplemental Trust Agreement or to the purchase of Subordinate Bonds at prices not exceeding the applicable Redemption Prices (plus accrued interest) had such Subordinate Bonds been redeemed (or, if not then subject to redemption, at the applicable Redemption Prices when next subject to redemption), such purchases to be paid for by the Master Trustee at such times and in such manner as arranged and directed by an Authorized Officer.

#### Senior Debt Service Reserve Fund

The Master Trustee shall promptly deposit in the Senior Debt Service Reserve Fund such amounts as set forth in a Supplemental Trust Agreement, if any.

The Master Trustee shall promptly deposit in the Senior Debt Service Reserve Fund any amounts transferred from the Revenue Fund as provided under the heading "Revenue Fund" in order to reimburse the Senior Debt Service Reserve Fund for transfers to the Senior Debt Service Fund to provide for payment of principal of and interest on the Bonds, a Scheduled Hedge Payment or Reimbursement Obligation due to a Payment Default.

The Master Trustee shall make the following transfers and payments from the Senior Debt Service Reserve Fund:

- (1) Upon receipt thereof by the Master Trustee all earnings derived from the investment or deposit of moneys in the Senior Debt Service Reserve Fund shall be transferred by the Master Trustee to the Revenue Fund;
- (2) If on any Debt Service Payment Date for any Senior Bonds Outstanding, after the transfer of amounts as set forth under "Revenue Fund," the amounts on deposit and available in the Senior Debt Service Fund and the Senior Redemption Fund are insufficient to pay Debt Service on the Senior Bonds and any Scheduled Hedge Payment or Reimbursement Obligations then payable by the Trust with respect to Senior Bonds, the Master Trustee shall promptly withdraw the amount of such deficiency from amounts on deposit in the Senior Debt Service Reserve Fund (or the balance in the Senior Debt Service Reserve Fund if the aggregate amount therein is less than such deficiency) as directed by the Trust, and shall deposit such amount in the Senior Debt Service Fund. Notwithstanding anything in the Master Trust Agreement to the contrary, in making any such transfers due to a deficiency resulting from a Payment Default attributable to the Clean Water Obligations, amounts, if any, in the Senior Debt Service Reserve Fund allocable to Drinking Water Obligations are so applied and, in making any such transfers or retentions due to a deficiency resulting from a Payment Default attributable to the Drinking Water Obligations, amounts, if any, in the Senior Debt Service Reserve Fund allocable to Drinking Water Obligations shall be applied to such purpose before any amounts in the Senior Debt Service Reserve Fund allocable to Drinking Water Obligations are so applied; and
- (3) Unless otherwise directed in the applicable Supplemental Trust Agreement, upon the written direction of the Trust on the Business Day on which principal on any Series of Senior Bonds is due and paid or duly provided for in accordance with the terms of such Series of Senior Bonds, the Master Trustee shall transfer to the Clean Water Equity Fund or the Drinking Water Equity Fund, an amount such that the aggregate amount remaining in the Senior Debt Service Reserve Fund allocable to such Series of Bonds shall be equal to the Series Debt Service Reserve Requirement calculated on such Business Day.

As long as no Event of Default shall have occurred and be continuing, the Master Trustee shall be entitled to rely without inquiry on a certificate of an Authorized Officer of the Trust as to the proper amounts to be deposited in or withdrawn from the Senior Debt Service Reserve Fund as required by this Section. The Trust shall furnish the Master Trustee with such a certificate prior to each time the Master Trustee is required or directed to deposit amounts in or withdraw amounts from the Fund. The Master Trustee shall retain copies of such certificates while any of the Bonds of such Series remain outstanding.

### **Subordinate Debt Service Reserve Fund**

The Master Trustee shall promptly deposit in the Subordinate Debt Service Reserve Fund such amounts as set forth in a Supplemental Trust Agreement, if any.

The Master Trustee shall promptly deposit in the Subordinate Debt Service Reserve Fund any amounts transferred to the Subordinate Debt Service Reserve Fund from the Revenue Fund as provided under the heading "Revenue Fund" in order to reimburse the Subordinate Debt Service Reserve Fund for transfers to the Subordinate Debt Service Fund to provide for payment of principal of and interest on the Subordinate Bonds, a Scheduled Hedge Payment or Reimbursement Obligation due to a Payment Default related to the applicable Series of Subordinate Bonds.

The Master Trustee shall make the following transfers and payments from the Subordinate Debt Service Reserve Fund:

- (1) Upon receipt thereof by the Master Trustee all earnings derived from the investment or deposit of moneys in the Subordinate Debt Service Reserve Fund shall be transferred by the Master Trustee to the Subordinate Debt Service Reserve Fund or as otherwise directed in the Supplemental Trust Agreement;
- (2) If on any Debt Service Payment Date for any Subordinate Bonds Outstanding, after the transfer under the heading "Revenue Fund," the amounts on deposit and available in the Subordinate Debt Service Fund and the Subordinate Redemption Fund are insufficient to pay Debt Service on the Subordinate Bonds and any Scheduled Hedge Payment or Reimbursement Obligations then payable by the Trust with respect to Subordinate Bonds, the Master Trustee shall promptly withdraw the amount of such deficiency from amounts on deposit in the Subordinate Debt Service Reserve Fund (or the balance in the Subordinate Debt Service Reserve Fund if the aggregate amount therein is less than such deficiency) as directed by the Trust, and shall deposit such amount in the Subordinate Debt Service Fund. Notwithstanding anything in the Master Trust Agreement to the contrary, in making any such transfers due to a deficiency resulting from a Payment Default attributable to the Clean Water Obligations, amounts, if any, in the Subordinate Debt Service Reserve Fund allocable to Drinking Water Obligations are so applied and, in making any such transfers or retentions due to a deficiency resulting from a Payment Default attributable to the Drinking Water Obligations, amounts, if any, in the Subordinate Debt Service Reserve Fund allocable to Drinking Water Obligations shall be applied to such purpose before any amounts in the Subordinate Debt Service Reserve Fund allocable to Drinking Water Obligations are so applied; and
- Unless otherwise directed in the applicable Supplemental Trust Agreement, upon the written direction of the Trust on the Business Day on which principal on any Series of Subordinate Bonds is due and paid or duly provided for in accordance with the terms of such Series of Subordinate Bonds, the Master Trustee shall transfer to the Clean Water Equity Fund or the Drinking Water Equity Fund, an amount such that the aggregate amount remaining in the Subordinate Debt Service Reserve Fund allocable to such Series of Subordinate Bonds shall be equal to the Series Debt Service Reserve Requirement calculated on such Business Day.

As long as no Event of Default shall have occurred and be continuing, the Master Trustee shall be entitled to rely without inquiry on a certificate of an Authorized Officer of the Trust as to the proper amounts to be deposited in or withdrawn from the Subordinate Debt Service Reserve Fund as required by this Section. The Trust shall furnish the Master Trustee with such a certificate prior to each time the Master Trustee is required or directed to deposit amounts in or withdraw amounts from the Fund. The Master Trustee shall retain copies of such certificates while any of the Bonds of such Series remain outstanding.

## **Clean Water Equity Fund**

Except as otherwise provided in the Master Trust Agreement or in any Supplemental Trust Agreement, upon the written direction of an Authorized Officer of the Trust, the Master Trustee shall deposit the following amounts in the Clean Water Equity Fund upon receipt thereof by the Master Trustee:

- (1) all Federal Capitalization Grants and Commonwealth Matching Grants allocable to the Clean Water SRF and amounts drawn thereon;
- (2) any other amounts paid to the Trust (or paid to the Commonwealth and appropriated to the Trust) representing financial assistance provided pursuant to the Clean Water Act for purposes of deposit in the Clean Water SRF;
- (3) any other amounts appropriated to the Trust by the Commonwealth for purposes of the Clean Water SRF;
- (4) all amounts transferred to the Clean Water Equity Fund from the Clean Water Deficiency Account in the Deficiency Fund held under the Program Resolution in accordance with Section 308 of the Program Resolution;
- (5) all amounts transferred to the Clean Water Equity Fund from the Drinking Water Equity Fund as permitted by the Master Trust Agreement;
- (6) all amounts paid to or for the account of the Trust by Borrowers on account of interest on any Interim Loan made in anticipation of any Loan allocable to the Clean Water SRF;
- (7) all other amounts required by any provision of the Master Trust Agreement to be deposited in the Clean Water Equity Fund; and
- (8) any other amounts paid to the Master Trustee by the Trust for deposit in the Clean Water Equity Fund.

Subject to the uses permitted by this Section, funds, securities, investments and other property held from time to time in the Clean Water Equity Fund are available for, and pledged to, the payment of Debt Service on the Bonds when due and the payment of any other amounts required to be paid from time to time from the Funds and accounts held under the Master Trust Agreement as provided under "Senior Debt Service Fund" or "Subordinate Debt Service Fund." Notwithstanding the limitations under the heading "Transfers Out of the Master Trust Agreement" and the preceding sentence, the Trust may from time to time pledge and grant a security interest in all or any of the assets of the Clean Water Equity Fund to any other Person in connection with the programmatic uses permitted by the Act or the Clean Water Act, which pledge may be on a parity with, or subordinate to, the pledge made under the Master Trust Agreement.

The available moneys in the Clean Water Equity Fund may be used (i) to make Loans or Interim Loans for Clean Water Projects and Title 5 Projects, (ii) subject to the limitations under the headings "Transfers Out of the Master Trust Agreement" and "Covenants as to Loans and Contract Assistance Payments," to reimburse the Trust for Interim Loans or Loans pursuant to existing Financing Agreements funded from moneys or assets in the Clean Water Program, (iii) to make up deficiencies in any Fund under the Master Trust Agreement, or (iv) to make deposits and provide other subsidies and assistance in connection with the Program and other programs of the Trust pursuant to applicable law, upon such terms as the Trust may determine, including deposits into the Senior Debt Service Reserve Fund or Subordinate Debt Service Reserve Fund as set forth in the applicable Supplemental Trust Agreement.

Subject to the limitations under the heading "Transfers Out of the Master Trust Agreement," if there is a shortfall in amounts needed to pay scheduled principal (upon maturity or a scheduled sinking fund payment only) of or interest on Prior Bonds under the applicable Prior Bond Resolution or Scheduled Hedge Payments due with respect to a Series of Prior Bonds which is not otherwise cured as provided the applicable Prior Bond Resolution or Program Resolution, the Trust shall direct the Master Trustee to transfer to the applicable Prior Bond trustee from the Clean Water Equity Fund, if applicable, an amount necessary cure such shortfall.

Unless otherwise specified in a Supplemental Trust Agreement or other resolution of the Trust, the Trust shall not be required to maintain any minimum balance in the Clean Water Equity Fund and the Trust makes no covenant to any Bondowner or any other party that funds or other assets will be available in the Clean Water Equity Fund in the event of a deficiency on any Debt Service Payment Date.

# **Drinking Water Equity Fund**

Except as otherwise provided in the Master Trust Agreement or in any Supplemental Trust Agreement, upon the written direction of an Authorized Officer of the Trust, the Master Trustee shall deposit the following amounts in the Drinking Water Equity Fund upon receipt thereof by the Master Trustee:

- (1) all Federal Capitalization Grants and Commonwealth Matching Grants allocable to the Drinking Water SRF and amounts drawn thereon;
- (2) any other amounts paid to the Trust (or paid to the Commonwealth and appropriated to the Trust) representing financial assistance provided pursuant to the Drinking Water Act for purposes of deposit in the Drinking Water SRF;
- (3) any other amounts appropriated to the Trust by the Commonwealth for purposes of the Drinking Water SRF;
- (4) all amounts transferred to the Drinking Water Equity Fund from the Drinking Water Deficiency Account in the Deficiency Fund held under the Program Resolution in accordance with Section 308 of the Program Resolution;
- (5) all amounts transferred to the Drinking Water Equity Fund from the Clean Water Equity Fund as permitted by the Master Trust Agreement;
- (6) all amounts paid to or for the account of the Trust by Borrowers on account of interest on any Interim Loan made in anticipation of any Loan allocable to the Drinking Water SRF;
- (7) all other amounts required by any provision of the Master Trust Agreement to be deposited in the Drinking Water Equity Fund; and
- (8) any other amounts paid to the Master Trustee by the Trust for deposit in the Drinking Water Equity Fund.

Subject to the uses permitted by this Section, funds, securities, investments and other property held from time to time in the Drinking Water Equity Fund are available for, and pledged to, the payment of debt service on the Bonds when due and the payment of any other amounts required to be paid from time to time from the Funds and accounts held under the Master Trust Agreement as provided under "Senior Debt Service Fund" or "Subordinate Debt Service Fund." Notwithstanding the limitations under the heading "Transfers Out of the Master Trust Agreement" and the preceding sentence, the Trust may from time to time pledge and grant a security interest in all or any of the assets of the Drinking Water Equity Fund to any other Person in connection with the programmatic uses permitted by the Act or the Drinking Water Act, which pledge may be on a parity with, or subordinate, to the pledge made under the Master Trust Agreement.

The available moneys in the Drinking Water Equity Fund may be used (i) to make Loans or Interim Loans for Drinking Water Projects, (ii) subject to the limitations under the headings "Transfers Out of the Master Trust Agreement" and "Covenants as to Loans and Contract Assistance Payments," to reimburse the Trust for Interim Loans or Loans pursuant to existing Financing Agreements funded from moneys or assets in the Drinking Water Program, (iii) to make up deficiencies in any Fund under the Master Trust Agreement, or (iv) to make deposits and provide other subsidies and assistance in connection with the Program and other programs of the Trust pursuant to applicable law, upon such terms as the Trust may determine, including deposits into the Senior Debt Service Reserve Fund or Subordinate Debt Service Reserve Fund as set forth in the applicable Supplemental Trust Agreement.

Subject to the limitations under the heading "Transfers Out of the Master Trust Agreement," if there is a shortfall in amounts needed to pay scheduled principal (upon maturity or a scheduled sinking fund payment only) of or interest on Prior Bonds under the applicable Prior Bond Resolution or Scheduled Hedge Payments due with respect to a Series of Prior Bonds which is not otherwise cured as provided the applicable Prior Bond Resolution or Program Resolution, the Trust shall direct the Master Trustee to transfer to the applicable Prior Bond trustee from the Drinking Water Equity Fund, if applicable, an amount necessary cure such shortfall.

Unless otherwise specified in a Supplemental Trust Agreement or other resolution of the Trust, the Trust shall not be required to maintain any minimum balance in the Drinking Water Equity Fund and the Trust makes no covenant to any Bondowner or any other party that funds or other assets will be available in the Drinking Water Equity Fund in the event of a deficiency on any Debt Service Payment Date.

## **Administrative Expense Fund**

The Trust shall deposit in the Administrative Expense Fund:

- (1) all amounts transferred from the Clean Water Equity Fund or the Drinking Water Equity Fund upon written direction of the Trust;
  - (2) all Administrative Fees received pursuant to any Financing Agreement;
- (3) except as otherwise provided in the applicable Financing Agreement, all Origination Fees payable with respect to any Loan or Interim Loan;
  - (4) all Origination Fees payable with respect to any Interim Loan; and
  - (5) any other amounts received by the Trust for such purpose.

Amounts deposited and held in the Administrative Expense Fund shall be applied by the Trust from time to time to the payment or reimbursement of Administrative Expenses.

## **Rebate Fund**

Amounts deposited in the Rebate Fund shall be applied by the Trust to pay to the United States any amount required to be so paid in order that the Bonds shall comply with the Rebate Provision. The Trust further covenants to pay such amount to the United States whether or not the amount on deposit in the Rebate Fund and available therefor is sufficient for such payment and to establish such accounting procedures as are required to determine the amount, if any, so payable.

In the event that, at the time of any required payment from the Rebate Fund, the amount in the Rebate Fund available for such payment shall be insufficient to make such payment (after deposit therein of any amounts provided in the Program Resolution), the Trust shall pay the amount of the deficiency from any moneys available therefor.

# **Cross-Collateralization**

Notwithstanding anything in the Master Trust Agreement to the contrary, the Trust may deliver at any time to the Master Trustee a certificate of an Authorized Officer pursuant to which the Trust may direct the transfer of funds or the allocation of liabilities (i) within the Clean Water Equity Fund or a Clean Water Account of any Fund to the Drinking Water Equity Fund or a Drinking Water Account of any Fund or (ii) within the Drinking Water Equity Fund or a Clean Water Account of any Fund. The only limitations on the transfer of funds shall be as set forth in the Act, the Clean Water Act and the Drinking Water Act. In addition, any moneys, funds, revenues or other assets in any funds, accounts or subaccounts created under the Master Trust Agreement may be used to pay Debt Service with respect to any Bonds (except as limited by the Master Trust Agreement) in a manner consistent with the Act, the Clean Water Act and the Drinking Water Act.

### **Investments**

Except as otherwise provided in the Master Trust Agreement, money held for the credit of any Fund under the Master Trust Agreement shall, to the fullest extent practicable, be invested, either alone or jointly with moneys in any other Fund, by or at the direction of an Authorized Officer, in Investment Obligations which shall mature or be redeemable at the option of the owner thereof, on such dates and in such amounts as may be necessary to provide moneys to meet the payments required to be made from such Funds, provided that if moneys in two or more funds or accounts are commingled for purposes of investments, the Master Trustee shall maintain appropriate records of the Investment Obligations or portions thereof which it makes and which are held for the credit of such Fund. Except as otherwise provided by an applicable Supplemental Trust Agreement, Investment Obligations purchased as an investment of moneys in any Fund shall be deemed at all times to be a part of such Fund and all income thereon shall accrue to and be deposited in such Fund and all losses from investment shall be charged against such Fund, provided that all income earned on investment or deposit of the Senior Debt Service Reserve Fund shall be credited to and deposited upon receipt in the Revenue Fund and all income earned on investment or deposit of the Subordinate Debt Service Reserve Fund shall be credited to and deposited upon receipt in the Subordinate Debt Service Fund or as otherwise directed in a Supplemental Resolution.

In computing the amount in any Fund under the Master Trust Agreement for any purpose, Investment Obligations shall be valued at amortized cost. As used in the Master Trust Agreement the term "amortized cost," when used with respect to an obligation purchased at a premium above or a discount below par, means the value as of any given time obtained by dividing the total premium or discount at which such obligation was purchased by the number of days remaining to maturity on such obligation at the date of such purchase and by multiplying the amount thus calculated by the number of days between the date of purchase and the maturity date; and (i) in the case of an obligation purchased at a premium by deducting the product thus obtained from the purchase price, and (ii) in the case of an obligation purchased at a discount by adding the product thus obtained to the purchase price. Notwithstanding the foregoing, Investment Obligations in a Senior Debt Service Reserve Fund or Subordinate Debt Service Reserve Fund shall be valued at amortized cost for all purposes of the Master Trust Agreement unless and until a withdrawal from such Fund shall be required in accordance with the Master Trust Agreement, as applicable, in which event such investments shall thereafter be valued at amortized cost or market, whichever is lower, until the balance in such Fund, on the basis of such valuation, shall equal the applicable Series Debt Service Reserve Fund Requirement. Unless otherwise provided in the Master Trust Agreement, Investment Obligations in any Fund under the Master Trust Agreement shall be valued at least once in each Fiscal Year on the last day thereof.

## Powers as to Bonds and Pledge

The Trust is duly authorized under the Act and all applicable laws to create and issue the Bonds and to adopt the Master Trust Agreement and to pledge and grant a security interest in the Loans, Revenues and other property purported to be pledged by the Master Trust Agreement in the manner and to the extent provided in the Master Trust Agreement. The Loans, Revenues and other property so pledged are and will be free and clear of any pledge, lien, charge or encumbrance thereon or with respect thereto prior to, or of equal rank with, the pledge created by the Master Trust Agreement except to the extent expressly permitted by the Master Trust Agreement. The Trust shall at all times, to the extent permitted by law, defend, preserve and protect the pledge of the Trust Estate and other property pledged under the Master Trust Agreement and all the rights of the Owners under the Master Trust Agreement against all claims and demands of all persons whomsoever. Nothing in this Section shall be deemed to limit the right of the Trust, and the Trust hereby expressly retains the right, to create a pledge, lien or other charge on the Trust Estate pledged under the Master Trust Agreement junior and subordinate to the pledge and lien created by the Master Trust Agreement; provided that such lien shall be subject to the transfers required to be made to Prior Bond trustees under the headings "Clean Water Equity Fund" and "Drinking Water Equity Fund."

## **Contract Assistance Fund**

Upon the written direction of an Authorized Officer of the Trust, the Master Trustee shall deposit the following amounts in the Contract Assistance Fund upon receipt thereof by the Master Trustee (1) to the Clean Water Account or the Drinking Water Account, as applicable (as directed by the Trust), all amounts received from the Commonwealth pursuant to a Transfer Requisition and (2) any other amounts paid to the Master Trustee and directed by the trust to be deposited in the Contract Assistance Fund.

Upon the written direction of an Authorized Officer of the Trust, the Master Trustee shall apply available moneys in the Contract Assistance Fund (1) pursuant to the Act, to provide subsidies or other financial assistance for specified Loans or Interim Loans and (2) as otherwise authorized or permitted by the Act.

Unless otherwise specified in a Supplemental Trust Agreement or other resolution of the Trust, the Trust shall not be required to maintain any minimum balance in the Contract Assistance Fund.

### **Extension of Payment of Bonds.**

The Trust shall not directly or indirectly extend or assent to the extension of the maturity of any of the Bonds or the time of payment of claims for interest by the purchase or funding of such Bonds or claims for interest or by any other arrangement and in case the maturity of any of the Bonds or the time for payment of claims for interest shall be extended, such Bonds or claims for interest shall not be entitled in case of any default under the Master Trust Agreement to the benefit of the Master Trust Agreement or to any payment out of any assets of the Trust or the funds (except funds held in trust for the payment of particular Bonds or claims for interest pursuant to the Master Trust Agreement) held by the Fiduciaries, except subject to the prior payment of the principal of all Bonds issued and Outstanding the maturity of which has not been extended and of such portion of the accrued interest on the Bonds as shall not be represented by such extended claims for interest. Nothing in this Section shall be deemed to limit the right of the Trust to issue Refunding Bonds and such issuance shall not be deemed to constitute an extension of maturity of Bonds.

# **Transfers Out of Master Trust Agreement**

Any moneys held by the Master Trustee pursuant to the Master Trust Agreement may be transferred out of the Funds, accounts and subaccounts of the Master Trust Agreement (i) in accordance with the provisions for such Funds and Accounts set forth in the Master Trust Agreement or (ii) free and clear of the lien of the Master Trust Agreement at the written direction of an Authorized Officer upon delivery to the Master Trustee of a written report setting forth that the removal of such moneys would not reduce the amount of Program Assets available in the then current or any future Fiscal Year to less than 115% of Aggregate Debt Service in the then current or any future Fiscal Year with respect to all Bonds Outstanding, Scheduled Hedge Payments and any Reimbursement Obligations.

#### **Covenants as to Loans and Contract Assistance Payments**

The Trust shall at all times comply with applicable law, including the Act, the Clean Water Act and the Drinking Water Act.

No Loan shall be made or acquired by the Trust from the proceeds of the Bonds or other moneys available therefor under the Master Trust Agreement and no Bonds shall be issued by the Trust for the purpose of providing funds with which to make Loans unless the Loans shall (1) comply with the terms, conditions, provisions and limitations of the Act, the Clean Water Act or the Drinking Water Act, as applicable, any applicable Grant Agreement and this Section, (2) finance or refinance the Projects that have been approved by the Department in accordance with the DEP Regulations and (3) have been approved by the Trust. Each Loan funded by the Trust under the Master Trust Agreement from the proceeds of Bonds other moneys available therefor under the Master Trust Agreement, shall be secured, shall be in the amounts and shall otherwise have such terms and conditions as specified in the Master Trust Agreement.

Except as otherwise permitted by the Master Trust Agreement, the Loans made or purchased with the proceeds of the Bonds shall have scheduled Borrower Payments thereon which, together with all other Program Revenues reasonably anticipated to be available for such purpose, shall be at least sufficient in aggregate amount and in time of receipt to pay in the current and each subsequent Fiscal Year all Aggregate Debt Service when due with respect to the Bonds, plus any Scheduled Hedge Payment and Reimbursement Obligations due.

The Trust shall duly and properly service all Loans and enforce the payment and collection of all Borrower Payments and all other payments, if any, thereon or shall cause such servicing to be done by a servicing agent evidencing, in the judgment of the Trust, the capability and experience necessary to adequately service Loans.

The Trust shall do all such acts and things necessary to receive and collect Borrower Payments and other Revenues as may be consistent with sound banking practices and principles and shall diligently enforce, and take all steps, actions and proceedings reasonably necessary in the judgment of the Trust for the enforcement of, all terms, covenants and conditions of all Loans (and the related Financing Agreements), the Commonwealth Assistance Contract and all Investment Obligations, including the prompt payment of all Borrower Payments and other Revenues due the Trust thereunder. The Trust shall at all times, to the extent permitted by law, defend, enforce, preserve and protect the rights and privileges of the Trust and of the Bondowners under or with respect to each Loan and all related Financing Agreements, the Commonwealth Assistance Contract and all Investment Obligations, provided that, subject to the terms of the applicable Financing Agreement and the rights of the Department thereunder and under the applicable Regulatory Agreement, the Trust shall have the power and authority to settle a Payment Default on any Loan or under the Commonwealth Assistance Contract or any Investment Obligation on such terms as the Trust shall determine to be in the best interests of the Trust and the Bondowners and to forbear from taking action with respect to enforcement of a Loan or any related Financing Agreement, or under the Commonwealth Assistance Contract or any Investment Obligation if it determines such forbearance to be in the best interests of the Trust and the Bondowners.

Whenever it shall be necessary in order to protect and enforce the rights of the Trust under a Loan, the Commonwealth Assistance Contract or any Investment Obligation and to protect and enforce the rights and interest of Bondowners under the Master Trust Agreement, the Trust shall take or cause to be taken steps to enforce the applicable Financing Agreement, the Commonwealth Assistance Contract or such Investment Obligation and to enforce any lien or security interest or other right created by such Loan or under the related Financing Agreement, the Commonwealth Assistance Contract or such Investment Obligation or otherwise available to the Trust under the Act, including without limitation the exercise of the rights provided in Section 11 of the Act with respect to local aid distributions payable by the Commonwealth to a Borrower or any member or other service recipient thereof or any parent governmental unit of any member or other service recipient thereof.

Subject to the provisions of the Clean Water Act or the Drinking Water Act, as applicable, and the applicable Financing Agreement and subject to the limitations under the headings "Transfers Out of the Master Trust Agreement" (unless a Loan is in default), the Trust may release from the pledge of the Master Trust Agreement any Loan or any participation or other interest therein, or transfer any such Loan to itself free and clear of the pledge of the Master Trust Agreement, or substitute or add a Loan to the lien of the Master Trust Agreement, provided that prior to such release, transfer, substitution or addition the Trust files with the Master Trustee a certificate of an Authorized Officer showing that following such release, transfer, substitution or addition anticipated Program Revenues (excluding the portion of any Borrower Payments representing the repayment of principal on the Loans not funded from Bond proceeds) available to pay Aggregate Debt Service, Scheduled Hedge Payments under Parity Hedge Agreement and Reimbursement Obligations secured on a parity with the Bonds in the current and each subsequent Fiscal Year will not be less than the Aggregate Debt Service payable by the Trust in the current and each subsequent Fiscal Year.

The Trust may consent or agree to or permit amendment or modification of the Commonwealth Assistance Contract or any Investment Obligation which the Trust determines to be in the best interests of the Trust and the Bondowners; provided that no such amendment or modification shall be effective until the Trust files with the Master Trustee a certificate of an Authorized Officer showing that following such amendment or modification anticipated Program Revenues available to pay Aggregate Debt Service in the current and each subsequent Fiscal Year when due will not be less than the amount of Program Revenues anticipated to be available for such purpose if the Commonwealth Assistance Contract or such Investment Obligation is not so amended or modified.

#### **Amendments to Financing Agreements and Loans**

Without notice to or the consent of any of the Bondowners, the Trust may, with prior written notice to the Master Trustee, execute and deliver one or more amendments to or supplements to the Financing Agreements pertaining to any of the Loans for any of the following purposes:

- (1) To cure any ambiguity, supply any omission or cure or correct any defect or inconsistent provisions in such Financing Agreement or Loan;
- (2) To insert any provisions therein, not contrary to or inconsistent with the instrument as theretofore in effect, clarifying matters or questions arising under the instrument or to effect any amendment thereof permitted by the terms of such instrument as theretofore in effect;

- (3) To insert, repeal or amend any provision in such instruments to comply with the Clean Water Act or the Drinking Water Act, as applicable, and the Act; or
- (4) If the Trust determines that such amendment or modification will not have a material adverse impact, taking into account the reasonable expectations with respect to such Loan immediately prior to such amendment or modification, on the Trust's ability to pay Aggregate Debt Service in the current and each subsequent Fiscal Year.

Without limiting the generality of the foregoing provisions of under this heading, subsequent to the issuance of any Refunding Bonds under the Master Trust Agreement for the purpose of refunding Prior Bonds, the Trust, with prior written notice to the Master Trustee and the applicable prior bond trustee, if any, may amend or otherwise modify the schedule of Borrower Payments, Contract Assistance Payments and Equity Earnings (as defined in the applicable Prior Bond Resolution) allocable to any Prior Loans funded by the Trust from the proceeds of the Refunded Prior Bonds to reflect the final allocation of debt service savings resulting from the issuance of the Refunding Bonds and the refunding of the Refunded Prior Bonds, provided that (i) such Borrower Payments, Contract Assistance Payments and Equity Earnings relating to Prior Loans, as so modified, shall be at least sufficient in aggregate amount and in time of receipt, together with all other amounts expected to be available therefor under the Prior Bond Resolutions, to pay in the current and each subsequent Fiscal Year the sum of all principal and premium of or interest when due on the Outstanding Prior Bonds and any applicable Outstanding Refunding Prior Bonds; (ii) the amounts anticipated to be transferred to the Master Trustee (as described below under the heading "Prior Bond Revenues") after such modifications, together with all other anticipated Program Revenues (excluding the portion of any Borrower Payments representing the repayment of principal on the Loans not funded from Bond proceeds), in the current and each subsequent Fiscal Year will not be less than the Aggregate Debt Service payable by the Trust in the current and each subsequent Fiscal Year with respect to all Outstanding Bonds; (iii) such amendment or other modification will not adversely affect the ratings then assigned to any Prior Bonds or the Bonds by any Rating Agency; and (iv) such amendment or other modification will not adversely affect the exclusion of interest on any Prior Bonds or the Bonds from gross income for federal income tax purposes, all as evidenced by a certificate of an Authorized Officer of the Trust to such effect delivered to the Bond Trustee and upon which the Bond Trustee may conclusively rely.

Except as provided above, the Trust shall not execute and deliver any amendment to or supplement of a Financing Agreement pertaining to any Loan, unless such amendment or supplement shall have been consented to by or on behalf of the Bondowners to the same extent and in the same manner as if such amendment or supplement were a Supplemental Trust Agreement to which the provisions of the Master Trust Agreement apply.

#### **Accounts and Reports**

The Trust shall keep, or cause to be kept, proper books of record and accounts in which complete and accurate entries shall be made of all its transactions relating to the Program and all Funds and Accounts established by or pursuant to the Master Trust Agreement, which shall at all reasonable times be subject to the inspection of the Master Trustee, any Borrower and the Owners of not less than 5% in aggregate principal amount of Bonds Outstanding or their representatives duly authorized in writing.

The Trust shall annually file with the Master Trustee within 120 days after the close of each Fiscal Year, file with the Master Trustee, and otherwise as provided by law, annual audited financial statements of the Trust prepared in accordance with generally acceptable accounting standards containing the report thereon of an independent public accountant or firm of accountants acceptable to the Master Trustee (the "Annual Audit"). A copy of each Annual Audit shall also be filed by the Trust with the MSRB.

# **Tax Covenant**

The Trust shall not use or permit the use of any proceeds of any Tax-Exempt Bonds or any other funds of the Trust, directly or indirectly, to acquire any securities or obligations, and shall not use or permit the use of any amounts received by the Trust or the Fiduciaries with respect to the Revenues or Loans any manner, and shall not otherwise take or permit to be taken any other action or actions, which would cause any Tax-Exempt Bond to be an "arbitrage bond" within the meaning of Section 148 of the Code or, to the extent applicable, which would cause any Tax-Exempt Bond to violate any of the restrictions contained in Section 141 through Section 150 the Code.

The Trust shall take all lawful action necessary to ensure that interest on the Tax-Exempt Bonds will remain excludable from gross income for federal income tax purposes and shall not use or permit the use of any proceeds of Tax-Exempt Bonds or any other funds of the Trust, directly or indirectly, in any manner, and shall not take or permit to be taken any other action or actions, which would cause the interest on the Tax-Exempt Bonds to become includable in gross income for federal income tax purposes.

#### **Prior Bond Revenues**

On or prior to each interest payment date for each series of Refunded Prior Bonds, the Trust shall deliver a certificate of instructions to the applicable prior bond trustee directing such prior bond trustee to transfer all Prior Bond Revenues after (1) the application of such amounts to the payment of Principal Installments (as defined in the applicable Prior Bond Resolution) and interest due and unpaid or to become due on such date on the applicable Outstanding Prior Bonds, and satisfaction of all other applicable requirements of the applicable Prior Bond Resolution (including without limitation, transfers to the Program Resolution), and (2) any transfers to other prior bond trustees on such dates as required by any applicable Refunding Prior Resolution (including without limitation, transfers to the Program Resolution), to the Master Trustee for deposit in the Revenue Fund held under the Master Trust Agreement.

#### **Events of Default**

Each of the following shall constitute an "Event of Default" under the Master Trust Agreement:

- (1) Default in the payment of the principal amount or Redemption Price of any Bond when due, whether at maturity or by call for redemption, or otherwise or in the payment of any Sinking Fund Payment when due;
  - (2) Default in the payment of any installment of interest on any Bond when due;
- (3) Default by the Trust in the performance or observance of any other of the covenants, agreements or conditions on its part provided in the Master Trust Agreement or in the Bonds and such default shall continue for a period of 30 days after written notice thereof shall be given to the Trust by the Master Trustee or to the Trust and the Master Trustee by the Owners of not less than 25% in aggregate principal amount of the Senior Bonds Outstanding (or if no Senior Bonds are then Outstanding, the Subordinate Bonds Outstanding); provided that if such default cannot be remedied within such 30-day period, it shall not constitute an Event of Default under the Master Trust Agreement if corrective action is instituted by or on behalf of the Trust within such period and diligently pursued until the default is remedied;
- (4) Default under a Parity Hedge Agreement upon notice to the Master Trustee from the applicable Hedge Provider of the default thereunder or under any Credit Enhancement or Liquidity Facility secured on parity with the Bonds upon written notice to the Master Trustee from the issuer of the Credit Enhancement or Liquidity Facility;
- (5) If an order, judgment or decree is entered by a court of competent jurisdiction (a) appointing a receiver, trustee, or liquidator for the Trust or the whole or any substantial part of its assets, (b) granting relief in involuntary proceedings with respect to the Trust under the Federal bankruptcy act, or (c) assuming custody or control of the Trust or of the whole or any substantial part of its assets under the provisions of any law for the relief of debtors, and the order, judgment or decree is not set aside or stayed within 60 days from the date of entry of the order, judgment or decree; or
- (6) If the Trust (a) admits in writing its inability to pay its debts or the interest thereon generally as they become due, (b) commences voluntary proceedings in bankruptcy or seeking a composition of indebtedness, (c) makes an assignment for the benefit of its creditors, (d) consents to the appointment of a receiver of the whole or any substantial part of its assets, or (e) consents to the assumption by any court of competent jurisdiction under any law for the relief of debtors of custody or control of the Trust or of the whole or any substantial part of its assets.

## **Application of Revenues and Other Moneys after Default**

The Trust covenants that if an Event of Default shall occur and shall not have been remedied, other than an Event of Default described in clause (3) under the heading "Events of Default," the Trust, upon demand of the Master Trustee, shall pay over or cause to be paid over, to the Master Trustee upon receipt thereof all Program Revenues, and other moneys pledged under the Master Trust Agreement. Unless otherwise directed by a court, all such Program Revenues and other moneys, and any other moneys received or collected by the Master Trustee acting pursuant to the Act or this Article VII, shall, except as provided below, be held, transferred and applied as provided in Article V.

In the event that, upon the happening and continuance of an Event of Default, other than an Event of Default described in clause (3) under the heading "Events of Default," the funds held by the Fiduciaries shall be insufficient for the payment of interest and principal then due on the Bonds, Scheduled Hedge Payments under Parity Hedge Agreements or Reimbursement Obligation Secured on a parity with the Bonds, such funds (other than funds held for the payment or redemption of particular Bonds which have theretofore become due at maturity or by call for redemption) and any other moneys received or collected by the Fiduciaries acting pursuant to the Act and the section of the Master Trust Agreement titled "Application of Revenues and Other Moneys after Default," after making provision for the payment of any expenses necessary in the opinion of the Master Trustee to protect the interests of the Owners of the Bonds, and for the payment of the charges and expenses and liabilities incurred and advances made by the Fiduciaries in the performance of their duties under the Master Trust Agreement, shall be applied as follows:

First: To the payment to the persons entitled thereto of all installments of interest then due on the Senior Bonds or Scheduled Hedge Payments under Parity Hedge Agreement secured on a parity with Senior Bonds or the interest component of any Reimbursement Obligations secured on a parity with Senior Bonds in the order of the maturity of such installments, and, if the amount available shall not be sufficient to pay in full any such installments, then to the payment thereof ratably, according to the amounts due on such installments, to the persons entitled, without any discrimination or preference; and

Second: To the payment to the persons entitled thereto of all unpaid principal of any Senior Bonds or any principal component of any Reimbursement Obligations secured on a parity with Senior Bonds which shall have become due, whether at maturity or by call for redemption, in the order of their due dates and, if the amounts available shall not be sufficient to pay in full all principal due on any date, then to the payment thereof ratably, according to the amounts of principal due on such date, to the persons entitled thereto, without any discrimination or preference.

Third: To the payment to the persons entitled thereto of all installments of interest then due on the Subordinate Bonds or Scheduled Hedge Payments under Parity Hedge Agreement secured on a parity with Subordinate Bonds or the interest component of any Reimbursement Obligations secured on a parity with Subordinate Bonds in the order of the maturity of such installments, and, if the amount available shall not be sufficient to pay in full any such installments, then to the payment thereof ratably, according to the amounts due on such installments, to the persons entitled, without any discrimination or preference; and

Fourth: To the payment to the persons entitled thereto of all unpaid principal of any Subordinate Bonds or any principal component of any Reimbursement Obligations secured on a parity with Subordinate Bonds which shall have become due, whether at maturity or by call for redemption, in the order of their due dates and, if the amounts available shall not be sufficient to pay in full all principal of Subordinate Bonds due on any date, then to the payment thereof ratably, according to the amounts of principal due on such date, to the persons entitled thereto, without any discrimination or preference.

Whenever moneys are to be applied by the Master Trustee pursuant to the provisions of this Section, such moneys shall be applied by the Master Trustee at such times, and from time to time, as the Master Trustee in its sole discretion shall determine, having due regard to the amount of such moneys available for application and the likelihood of additional money becoming available for such application in the future; the deposit of such moneys with the Paying Agents, or otherwise setting aside such moneys in trust for the proper purpose, shall constitute proper application by the Master Trustee; and the Master Trustee shall incur no liability whatsoever to the Trust, to any Bondowner, any provider of Credit Enhancement or a Liquidity Facility, to any Hedge Provider or to any other person for any delay in applying any such moneys, so long as the Master Trustee acts with reasonable diligence, having due regard for the circumstances, and ultimately applies the same in accordance with such provisions of the Master Trust Agreement as

may be applicable at the time of application by the Master Trustee. Whenever the Master Trustee shall exercise such discretion in applying such moneys, it shall fix the date (which shall be a Debt Service Payment Date unless the Master Trustee shall deem another date more suitable) upon which such application is to be made and upon such date interest on the principal amount to be paid on such date shall cease to accrue. The Master Trustee shall give such notice as it may deem appropriate for the fixing of any such date.

If and whenever all overdue installments of interest on all Bonds together with the reasonable and proper charges and expenses of the Fiduciaries, and all other sums payable by the Trust under the Master Trust Agreement, including the principal amount and Redemption Price of and accrued unpaid interest on all Bonds which shall then be payable, shall either be paid by or for the account of the Trust, or provision satisfactory to the Master Trustee shall be made for such payment, and all Events of Default under the Master Trust Agreement shall have been cured, the Master Trustee shall reassign and endorse the Loans to the Trust, and thereupon the Trust and the Master Trustee shall be restored, respectively, to their former positions and rights under the Master Trust Agreement and all Revenues and other moneys shall thereafter be applied as provided under the heading "Revenue Fund." No such reassignment to the Trust by the Master Trustee or resumption of the application of Revenues as provided under the heading "Revenue Fund" shall extend to or affect any subsequent default under the Master Trust Agreement or impair any right consequent thereon.

#### **Proceedings Brought by Master Trustee**

Upon the happening and continuance of any Event of Default, then, and in each such case, the Master Trustee may proceed, and upon the written request of the Owners of not less than 25% in aggregate principal amount of the Senior Bonds Outstanding shall proceed, in its own name, to protect and enforce its rights and the rights of the Bondowners by such of the following remedies, as the Master Trustee, being advised by counsel, shall deem most effectual to protect and enforce such rights:

- (1) By suit, action or proceeding, to enforce all rights of the Bondowners, including the right to require the Trust to carry out the covenants and agreements as to the Revenues and Loans and to require the Trust to carry out any other covenant or agreement with Bondowners and to perform its duties under the Act;
  - (2) By bringing suit upon the Bonds;
- (3) By action or suit, to require the Trust to account as if it were the trustee of an express trust for the Owners of the Bonds;
- (4) By action or suit, to enjoin any acts or things which may be unlawful or in violation of the Master Trust Agreement or of the rights of the Owners of the Bonds;
  - (5) By exercising any and all rights of the Trust with respect to the Revenues and Loans; and

Upon the occurrence of an Event of Default, other than an Event of Default described in clause (3) under the heading "Events of Default," the Trust, at the request of the Master Trustee or the Owners of not less than 25% in aggregate principal amount of the Outstanding Senior Bonds, shall assign, endorse and convey to the Master Trustee any and all interests and rights held by the Trust in the Loans pledged under the Master Trust Agreement and shall take any other steps requested by the Master Trustee or Bondowners to further effectuate the rights of the Master Trustee under the Master Trust Agreement to such Loans.

During any period in which an Event of Default shall have occurred and be continuing, if there are Outstanding under the Master Trust Agreement any Subordinate Bonds, the registered owners of such Subordinate Bonds shall be entitled to the appointment of a trustee to act on their behalf in any suit, action or proceeding under the Master Trust Agreement and to otherwise exercise on their behalf any of their rights under the Master Trust Agreement; provided, however, that such trustee shall not be entitled to hold any Funds or Accounts under the Master Trust Agreement which shall continue to be held under the Master Trust Agreement by the Master Trustee. During such period, the Master Trustee under the Master Trust Agreement shall act exclusively on behalf of the registered owners of the Senior Bonds Outstanding; provided, however, the Master Trustee shall continue to bear its fiduciary obligation to all Bondowners as provided in the Master Trust Agreement with respect to any Funds and Accounts or any other amounts held in trust under the Master Trust Agreement. Any such trustee may be appointed with the

consent of a majority in the principal amount Outstanding of Subordinate Bonds. Notice of the appointment of any such trustee shall be given to the Master Trustee and the Trust promptly upon such appointment and to all registered owners of Subordinate Bonds.

If no Senior Bonds are Outstanding under the Master Trust Agreement, then the Owners of not less than 25% in aggregate principal amount of the Subordinate Bonds then Outstanding shall direct proceedings as set forth in this Section.

### **Restriction on Owners' Action**

No Owner of any Bond shall have any right to institute any suit, action or proceeding at law or in equity for the enforcement of any provision of the Master Trust Agreement or for any remedy under the Trust Agreement, unless such Owner shall have previously given to the Master Trustee written notice of the happening of any Event of Default and the Owners of at least a majority in principal amount of Senior Bonds then Outstanding, or if no Senior Bonds are then Outstanding, the Subordinate Bonds then Outstanding, shall have filed a written request with the Master Trustee, and shall have offered it reasonable opportunity, to exercise the powers granted in this Article in its own name, and unless such Owners shall have offered to the Master Trustee adequate security and indemnity against the costs, expenses and liabilities to be incurred thereby, and the Master Trustee shall have refused to comply with such request within a reasonable time.

Nothing in the Master Trust Agreement shall affect or impair the obligation of the Trust to pay on the respective dates of maturity thereof the principal amount of and interest on the Bonds, to the extent that such payments are permitted under the Master Trust Agreement, or affect or impair the right of action of any Owner to enforce the payment of its Bonds.

#### Remedies not Exclusive

No remedy by the terms of the Master Trust Agreement conferred upon or reserved to the Master Trustee or the Registered Owners is intended to be exclusive of any other remedy, but each and every such remedy shall be cumulative and shall be in addition to every other remedy given under the Master Trust Agreement or provided at law or in equity or by statute.

#### **Effect of Waiver and Other Circumstances**

No delay or omission of the Master Trustee or of any Registered Owner to exercise any right or power arising upon the occurrence of an Event of Default shall impair any right or power or shall be construed to be a waiver of any such default or to be an acquiescent therein.

The Registered Owners of a majority in principal amount of the Senior Bonds then Outstanding, or if no Senior Bonds are then Outstanding, the Subordinate Bonds then Outstanding, may on behalf of the Registered Owners of all of the Bonds waive any past default under the Trust Agreement and its consequences, except a default in the payment of interest on or principal or Redemption Price of any of the Bonds. No such waiver shall extend to any subsequent or other default.

## No Right of Acceleration

The Owners, the Master Trustee, any Hedge Provider and any issuer of Credit Enhancement or Liquidity Facility shall not have any right to accelerate the payment of principal or interest due on any Bonds Outstanding, Reimbursement Obligations or payments due under Parity Hedge Agreements upon the occurrence of an Event of Default.

# Resignation

The Master Trustee may at any time resign and be discharged of the duties and obligations created by the Master Trust Agreement by giving not less than 30 days' written notice to the Trust and each Registered Owner specifying the date when such resignation shall take effect, and such resignation shall take effect upon the day specified in such notice provided a successor shall have been appointed, unless previously a successor shall have been appointed

by the Trust or the Registered Owners as hereinafter provided, in which event such resignation shall take effect immediately on the appointment of such successor. A Paying Agent (other than the Master Trustee) may at any time resign and be discharged of its duties and obligations created by the Master Trust Agreement or any applicable Supplemental Trust Agreement according to the terms of the Paying Agent's agreement with the Trust and otherwise by giving 30 days' written notice to the Trust and the Master Trustee. If there exists an Event of Default under the Master Trust Agreement and the Master Trustee determines that it is a conflict of interest to serve as Master Trustee for both the Senior Bonds and the Subordinate Bonds, the Master Trustee may resign and a successor Master Trustee may be appointed (at no expense to the prior Master Trustee) for the Subordinate Bonds by the Registered Owners of a majority in principal amount of the Subordinate Bonds then Outstanding and pending such appointment, as further set forth under the heading "Appointment of Successor Fiduciary."

## Removal

The Master Trustee may be removed at any time by an instrument or concurrent instruments in writing, filed with the Master Trustee, and signed by the Registered Owners of a majority in principal amount of the Senior Bonds then Outstanding, or if no Senior Bonds are Outstanding, of a majority in principal amount of the Subordinate Bonds then Outstanding, or their attorneys-in-fact duly authorized, excluding any Bonds held by or for the account of the Trust. Except during the existence of an Event of Default, the Trust may remove the Master Trustee at any time for cause or upon not less than 30 days' prior written notice to the Master Trustee for such other reason as shall be determined in the sole discretion of the Trust. Any such removal shall take effect upon the date specified in such notice, provided a successor shall have been appointed, unless previously a successor shall have been appointed by the Trust or the Registered Owners as hereinafter provided, in which event such removal shall take effect immediately on the appointment of such successor. A Paying Agent (other than the Master Trustee) may be removed at any time by the Trust, upon filing with the Master Trustee and with such Paying Agent a copy of the resolution of the Trust, certified by an Authorized Officer, providing for the removal of such Paying Agent.

# **Appointment of Successor Fiduciary**

In case at any time a Fiduciary shall resign or shall be removed or shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or if a receiver, liquidator or conservator of such Fiduciary, or of its property, shall be appointed, or if any public officer shall take charge or control of such Fiduciary, or of its property or affairs, a successor may be appointed (i) in the case of the Master Trustee, by the Registered Owners of a majority in principal amount of the Senior Bonds then Outstanding, or if no Senior Bonds are Outstanding, of a majority in principal amount of the Subordinate Bonds then Outstanding, excluding any Bonds held by or for the account of the Trust, by an instrument or concurrent instruments in writing signed and acknowledged by such Registered Owners or by their attorneys-in-fact duly authorized and delivered to such successor Master Trustee, notification thereof being given to the Trust and the predecessor Master Trustee and any other Fiduciary, and (ii) in the case of the Paying Agent, by the Trust, notification thereof being given to the predecessor Paying Agent and any other Fiduciary. Pending the appointment of a successor Master Trustee by the Registered Owners of a majority in principal amount of the Senior Bonds then Outstanding, or if no Senior Bonds are Outstanding, of a majority in principal amount of the Subordinate Bonds then Outstanding, the Trust by a written instrument signed by an Authorized Officer and delivered to the predecessor Master Trustee shall forthwith appoint a Master Trustee to fill such vacancy until a successor Master Trustee shall be appointed by the Registered Owners as authorized in the Master Trust Agreement. An Authorized Officer shall give written notice of any such appointment made by it to each Registered Owner and to the predecessor Master Trustee within 30 days after the date of such appointment. Any successor Master Trustee appointed by the Trust shall, immediately and without further act, be superseded by a Master Trustee appointed by the Registered Owners. If in a proper case no appointment of a successor Master Trustee shall be made pursuant to the foregoing provisions of this Section within 45 days after the Master Trustee shall have given to the Trust written notice or after the occurrence of any other event requiring or authorizing such appointment, the Master Trustee or any other Fiduciary or the Registered Owner of any Senior Bond, or if no Senior Bonds are then Outstanding, any Subordinate Bond, may apply to any court of competent jurisdiction to appoint a successor Master Trustee. Said court may thereupon, after such notice, if any, as such court may deem proper and prescribe, appoint a successor Master Trustee. Any Master Trustee appointed under the provisions of this Section in succession to the Master Trustee shall be a bank or trust company or a national banking association authorized to do business in the Commonwealth, having a capital and surplus aggregating at least \$50,000,000, if there be such a bank or trust company or national banking association willing and able to accept the office on reasonable and customary terms and authorized by law to perform all duties imposed upon it by the Master Trust Agreement.

## Supplemental Trust Agreements Effective upon Filing

The Trust and the Master Trustee may at any time and from time to time enter into supplements or amendments to the Master Trust Agreement for any one or more of the following purposes, which Supplemental Trust Agreements upon the execution thereof on behalf of the Trust and the Master Trustee in accordance with the Master Trust Agreement shall be fully effective in accordance with their terms:

- (1) to cure any ambiguity, inconsistency or formal defect or omission in the Master Trust Agreement not inconsistent with the terms of the Master Trust Agreement;
- (2) to close the Master Trust Agreement against, or provide limitations and restrictions contained in the Master Trust Agreement on the original issuance of Bonds;
- (3) to add to the covenants and agreements of the Trust contained in the Master Trust Agreement other covenants and agreements thereafter to be observed for the purpose of further securing the Bonds;
- (4) to surrender any right, power or privilege reserved to or conferred upon the Trust by the Master Trust Agreement;
- (5) to authorize Bonds of a Series for any purpose permitted under the Master Trust Agreement or hereafter authorized by law and, in connection therewith, to specify and determine any matters and things relative to such Bonds not contrary to or inconsistent with the Master Trust Agreement, including without limitation, pledging moneys or accounts not otherwise pledged pursuant to the terms of the Master Trust Agreement to the payment of such Series of Bonds;
  - (6) to authorize any Credit Enhancement or Liquidity Facility;
- (7) to exercise any provision in the Master Trust Agreement or to make such determinations under the Master Trust Agreement as expressly provided in the Master Trust Agreement to be exercised or determined in a Supplemental Trust Agreement;
- (8) to confirm, as further assurance, any pledge under and the subjection to any lien or pledge created or to be created by the Master Trust Agreement of the Trust Estate;
  - (9) upon receipt of a Rating Confirmation; or
- (10) for any other purpose, provided that such Supplemental Trust Agreement does not, in the reasonable judgment of the Master Trustee, prejudice in any material respect the rights of the Registered Owner of any Bonds Outstanding at the date such Supplemental Trust Agreement becomes effective.

# **Supplemental Trust Agreements Amending Trust Agreement or Bonds**

At any time or from time to time but subject to the conditions or restrictions in the Master Trust Agreement contained, the Trust and the Master Trustee may amend or supplement the Master Trust Agreement modifying any of the provisions of the Master Trust Agreement or Bonds or releasing the Trust from any of the obligations, covenants, agreements, limitations, conditions or restrictions therein contained, but, except as provided under the heading "Supplemental Trust Agreements Effective Upon Filing," no such amendment or supplement shall be effective until after the execution of such amendment or supplement on behalf of the Trust and the Master Trustee and unless (a) no Bonds authorized by a Supplemental Trust Agreement adopted prior to the adoption of such amendment or supplement remain Outstanding at the time it becomes effective, or (b) such amendment or supplement is consented to by or on behalf of the Owners of the Senior Bonds Outstanding, or if no Senior Bonds are Outstanding, the Subordinate Bonds Outstanding, at the time such consent is given in accordance with and subject to the provisions of the Master Trust Agreement.

## Adoption and Filing of Supplemental Trust Agreement

Any supplement or amendment to the Master Trust Agreement referred to and permitted or authorized by the Master Trust Agreement may be executed on behalf of the Trust and the Master Trustee and, except as provided under the heading "Supplemental Trust Agreements Amending Trust Agreement or Bonds," become effective without the consent of any of the Registered Owners, but shall become effective only on the conditions to the extent and at the time provided in this Article. Every such amendment or supplement so becoming effective shall thereupon form a part of the Master Trust Agreement. Any such amendment or supplement shall be accompanied by a Bond Counsel's opinion (upon which the Master Trustee may conclusively rely) to the effect that such amendment or supplement has been duly and lawfully executed and delivered by the Trust and the Master Trustee in accordance with the provisions of the Master Trust Agreement, is authorized or permitted by the Master Trust Agreement, and constitutes the lawful and binding obligation of the Trust in accordance with its terms. The Master Trustee shall deliver a copy of each Supplemental Trust Agreement promptly upon receipt thereof to each Rating Agency then maintaining a rating on any Bonds Outstanding.

#### **Powers of Amendment**

Except as provided under the heading "Supplemental Trust Agreements Effective Upon Filing," any modification or amendment of the Bonds or of the Master Trust Agreement may be made by a Supplemental Trust Agreement with the written consent given as provided under the heading "Consent of Registered Owners" (i) of the Registered Owners of at least a majority in the principal amount of all Senior Bonds Outstanding, or if no Senior Bonds are Outstanding, all Subordinate Bonds Outstanding, at the time such consent is given, or (ii) in case less than all of the several Series of Bonds then Outstanding are affected by the modification or amendment, of the Registered Owners of at least a majority in principal amount of each class by lien and priority of the Bonds of each Series so affected and Outstanding at the time such consent is given, and (iii) in case the modification or amendment changes the amount or date of any Sinking Fund Payment, of the Owners of the Bonds of the particular Series and maturity entitled to such Sinking Fund Payment, provided, however, that, if such modification or amendment will, by its terms, not take effect so long as any Bonds of any specified like Series and maturity remain Outstanding, the vote or consent of the Owners of such Bonds shall not be required and such Bonds shall not be deemed to be Outstanding for the purpose of any calculation of Outstanding Bonds under this Section. No modification or amendment of the Master Trust Agreement made by any Supplemental Trust Agreement executed by the Trust and the Master Trustee pursuant to the Master Trust Agreement shall permit (i) a change in the terms of redemption or maturity of the principal amount of any Outstanding Senior Bond or Subordinate Bond or of any installment of interest thereon or (ii) a reduction in the principal amount or the Redemption Price thereof or the rate of interest thereon or the method for determining such rate or, (iii) except as otherwise provided in the applicable Supplemental Trust Agreement, a change in the terms of any Credit Enhancement or Liquidity Facility relating to a Bond, or (iv) a reduction of the percentages of the principal amount of Bonds the consent of which is required to effect any such modification or amendment, without in each case, the consent of the Registered Owner of such Senior Bond or Subordinate Bond, as applicable. No modification or amendment of the Master Trust Agreement made by any Supplemental Trust Agreement executed by the Trust and the Master Trustee shall have a materially adverse effect on any of the rights or obligations of the Master Trustee or any Hedge Provider or any issuer of Credit Enhancement or Liquidity Facility without its written assent thereto.

## **Consent of Registered Owners**

The Trust and the Master Trustee may at any time execute a Supplemental Trust Agreement making a modification or amendment permitted by the provisions of the Master Trust Agreement, to take effect when and as provided in this Section. Upon the execution of such Supplemental Trust Agreement, a copy thereof shall be filed with the Master Trustee for inspection by the Registered Owners. A copy of such Supplemental Trust Agreement (or summary thereof or reference thereto in form approved by the Master Trustee) together with a request to Registered Owners for their consent thereto in form satisfactory to the Master Trustee shall be mailed by the Trust to Registered Owners (but failure to mail such copy and request shall not affect the validity of the Supplemental Trust Agreement when consented to as in this Section provided). Such Supplemental Trust Agreement shall not be effective unless and until there shall have been filed with the Master Trustee the written consents of the percentages of the Registered Owners of Outstanding Bonds specified under "Powers of Amendment" and a notice shall have been given as hereinafter in this Section provided. Any such consent shall be binding upon the Registered Owner of the Bonds giving such consent and on any subsequent Registered Owner of such Bonds (whether or not such subsequent Registered Owner has notice thereof). At any time after the Registered Owners of the required percentages of Bonds shall have

filed their consent to the Supplemental Trust Agreement, notice, stating in substance that the Supplemental Trust Agreement has been consented to by the Registered Owners of the required percentages of Bonds and will be effective as provided in this sections may be given to the Registered Owners by mailing such notice to Registered Owners (but failure to mail such notice shall not prevent such Trust Agreement from becoming effective and binding as provided in the Master Trust Agreement). An Authorized Officer shall file with the Master Trustee proof of giving such notice. Such Supplemental Trust Agreement shall be deemed conclusively binding upon the Trust, the Master Trustee and the Registered Owners of the all Bonds at the expiration of 60 days after the filing with the Master Trustee of the proof of the mailing of such notice, except in the event of a final decree of a court of competent jurisdiction setting aside such consent in a legal action or equitable proceeding commenced for such purpose within such sixty day period; provided, however, that the Master Trustee and the Trust during such sixty day period and any such further period during which any such action or proceeding may be pending shall be entitled in their absolute discretion to take such action, or to refrain from taking such action, with respect to such Supplemental Trust Agreement as they may deem expedient.

## **Modification by Unanimous Action**

Notwithstanding anything contained in Master Trust Agreement, the rights and obligations of the Trust and of the Registered Owners of the Bonds and the terms and provisions of the Bonds or of the Master Trust Agreement may be modified or amended in any respect upon the execution of a Supplemental Trust Agreement on behalf of the Trust and the Master Trustee and the consent of the Registered Owners of all of the Bonds then Outstanding, such consent to be given as provided under the heading "Consent of Registered Owners" except that no notice to Registered Owners shall be required; provided, however, that no such modification or amendment shall change or modify any of the rights or obligations of the Master Trustee without its written assent thereto.

#### **Exclusion of Bonds**

Bonds owned or held by or for the account of the Trust shall not be deemed Outstanding for the purpose of any consent or other action or any calculation of Outstanding Bonds provided for in this Article, and shall not be entitled to consent or take any other action provided for in this Article. At the time of any consent or other action taken under this Article, the Trust shall furnish the Master Trustee a certificate of an Authorized Officer, upon which the Master Trustee may rely, describing all Bonds to be excluded.

## **Defeasance**

If the Trust shall pay or cause to be paid, or there shall otherwise be paid, to the Registered Owners of any Series of Bonds then Outstanding, the principal amount and interest and Redemption Price, if any, to become due thereon, at the times and in the manner stipulated therein and in the Master Trust Agreement, and if no Reimbursement Obligations or Qualified Hedge Payments then due and payable remain unpaid relating to such Series of Bonds or payment of such Reimbursement Obligations or Qualified Hedge Payments have been provided for, then the pledge of any Revenues or other moneys and securities pledged by the Master Trust Agreement and all other rights granted by the Master Trust Agreement securing such Series of Bonds shall be discharged and satisfied. In such event, the Master Trustee shall, upon request of the Trust, execute and deliver to the Trust all such instruments as may be desirable to evidence such release and discharge and shall pay over or deliver to the Trust all moneys or securities held by it pursuant to the Master Trust Agreement which are not required for the payment or redemption of Bonds not theretofore surrendered for such payment or redemption or for the payment of Reimbursement Obligations or Qualified Hedge Payments.

Bonds or portion thereof or interest installments for the payment or redemption of which moneys shall be held by a Fiduciary (through deposit by the Trust of funds for such payment or redemption or otherwise), whether at or prior to the maturity or the redemption date of such Bonds, shall be deemed to have been paid within the meaning and with the effect expressed in the paragraph above. All Outstanding Bonds of any Series or any part of a Series shall prior to the maturity or redemption date thereof be deemed to have been paid within the meaning and with the effect expressed in the paragraph above if (i) in case any of said Bonds are to be redeemed on any date prior to their maturity, an Authorized Officer shall have given to the Master Trustee, in form satisfactory to it, irrevocable instructions to provide, as provided in the Master Trust Agreement, notice of redemption on said date of such Bonds, (ii) there shall have been deposited with a Fiduciary either (x) moneys in an amount which shall be sufficient or (y) Defeasance Obligations (a) not subject to redemption at the option of the issuer thereof prior to the due date thereof or (b) as to

which an irrevocable notice of redemption of such securities on a specified redemption date has been given and such securities are not otherwise subject to redemption prior to such specified date other than at the option of the owner thereof or (C) which are subject to redemption prior to maturity at the option of the issuer thereof on a specified date or dates, in each case the principal of and interest on which when due will provide moneys which, together with the moneys, if any, deposited with a Fiduciary at the time of deposit of such Defeasance Obligations, shall be sufficient (without reference to any forward purchase agreement as hereinafter provided), as certified by a firm of independent public accountants or a certified public accountant, to pay when due the principal amount or Redemption Price, if applicable, and interest due and to become due on said Bonds on and prior to the redemption date or maturity date thereof, as the case may be, and in the event said Bonds do not mature and are not by their terms subject to redemption within the next succeeding 60 days, an Authorized Officer shall have given the Master Trustee in form satisfactory to it irrevocable instructions to provide, as soon as practicable, written notice to the Registered Owners of such Bonds that the deposit required by clause (ii) above has been made with a Fiduciary and that said Bonds are deemed to have been paid in accordance with in the paragraph above and stating the maturity or redemption date upon which moneys are to be available for the payment of the principal amount or Redemption Price, if applicable, on said Bonds.

Anything in the Master Trust Agreement to the contrary notwithstanding any moneys held by a Fiduciary in trust for the payment and discharge of any Bonds which remain unclaimed for three years after the date when such Bonds have become due and payable, either at their stated maturity dates or by call for earlier redemption, if such moneys were held by the Fiduciary at such date, or for six months less than the applicable statutory escheat period (as determined by an Authorized Officer) if such moneys were deposited with the Fiduciary after the date when such Bonds become due and payable, shall, upon written direction from the Trust, be paid to the Trust as its absolute property and free from trust, and such Fiduciary shall thereupon be released and discharged with respect thereto and the Owners shall look only to the Trust for the payment of such Bonds, provided that before being required to make any such payment to the Trust, such Fiduciary shall, at the expense of the Trust, cause to be published at least twice, at an interval of not less than seven days between publications, in Authorized Newspapers, a notice that said moneys remain unclaimed it and that, after a date named in said notice, which date shall not be less than 30 days after the date of the first publication of such notice, the balance of such moneys then unclaimed will be returned promptly to the Trust.

#### Subordination to Prior Bonds and Prior Bond Resolutions.

All obligations, rights and remedies of the Trust or the Master Trustee under the Master Trust Agreement or any Supplemental Trust Agreement as it relates to Prior Loans or agreements related to Prior Loans, including receipt of Revenues after an Event of Default or exercise of remedies, is expressly subject and subordinate to the obligations, rights and remedies of the Trust and the prior bond trustees under the Prior Bond Resolutions, and the Program Trustee under the Program Resolution.

## Law and Place of Enforcement of the Master Trust Agreement

The Master Trust Agreement shall be construed and governed in accordance with the laws of the Commonwealth and all suits and actions arising out of the Master Trust Agreement shall be instituted in a court of competent jurisdiction in the Commonwealth.

## **Summary of Certain Provisions of the Financing Agreements**

## The Loans or Local Governmental Obligations

Under the terms and conditions of the Financing Agreement between the Trust and each borrower, the Trust agrees to either make a Loan to, or to purchase Local Governmental Obligations from, the borrower, and the borrower agrees to make borrower Payments at the times and in the amounts set forth in the Financing Agreement.

## **Payments**

All borrower Payments under the Financing Agreement shall be applied, first, to the interest, if any, on the Loan or Local Governmental Obligations then due and payable, and second, to the principal amount of the Loans or Local Governmental Obligations then due and payable. On or prior to each Payment Date, the borrower will pay to the Bond

Trustee for the account of the Trust, by wire transfer to such account or otherwise in such manner as the Trust may from time to time designate to the borrower, the borrower Payments then due on the Loans or Local Governmental Obligations.

Under the Financing Agreements for Loans and Local Governmental Obligations, the borrowers are required to make borrower Payments which are net of Equity Earnings and net of Contract Assistance Payments that the Trust expects to receive and to apply to pay a portion of its debt service on the Bonds. In the event of a deficiency in the related Equity Earnings or Contract Assistance Payments, the Payments of such borrowers are not increased to cover the shortfall under such Financing Agreements.

## Prepayment of Loans or Local Governmental Obligations

The Loans or Local Governmental Obligations are not subject to prepayment at the option of the borrower prior to maturity without the prior written consent of the Trust.

## Disbursement of Proceeds of the Loans or Local Governmental Obligations

The Trust will make a deposit within the Project Fund under the Master Trust Agreement for each Project financed or refinanced by the Loans or Local Governmental Obligations (each such deposit, a "Project Account"). Amounts deposited in the Project Account shall be applied by the Trust to the payment or reimbursement of Costs of the related Project as provided in the Financing Agreement, in the related Regulatory Agreement and in the Master Trust Agreement. Only amounts on deposit in a Project Account representing proceeds of Bonds or other moneys of the Trust deposited therein as provided in the Financing Agreement and the Master Trust Agreement will be available to pay Project Costs.

Upon receipt by the Trust of a disbursement completion certificate provided in the applicable Regulatory Agreement, any balance remaining on deposit in the Project Account not then payable to or for the account of the borrower in accordance with the disbursement completion certificate will be applied at the direction of the borrower with the prior approval of the Trust to (i) additional Costs of the applicable Project upon amendment of the definition thereof approved by DEP, or (ii) the prepayment of Loans or Local Governmental Obligations as provided in the Financing Agreement.

#### **Tax Covenants**

So long as any Bonds shall be outstanding and unpaid, the borrower agrees that it shall not take, or permit to be taken, any action or actions that would cause any Bond to be an "arbitrage bond" within the meaning of Section 148 of the Code or a "private activity bond" within the meaning of Section 141(a) of the Code or that would cause any Bond to be "federally guaranteed" within the meaning of Section 149(b) of the Code, or that would otherwise cause any amounts payable with respect to the Bonds to become included in gross income for federal income tax purposes; the borrower further agrees that it shall take all actions, and shall maintain all records and accounts, required by any provision of applicable law, necessary to comply with, or necessary to permit the Trust to comply with, the provisions of Section 148(f) of the Code.

#### **Defaults and Remedies**

Failure of the borrower to pay when due all or any part of any borrower Payment payable under the Financing Agreement shall be and shall constitute an immediate Event of Default under the Financing Agreement and the related Loans or Local Governmental Obligations. Failure of the borrower to perform and observe any other covenant, agreement or condition on its part provided in the Financing Agreement or in the related Loans or Local Governmental Obligations shall constitute an Event of Default if not cured within a period of thirty days after written notice thereof.

Upon the occurrence of any Event of Default under the Financing Agreement, the Trust shall have, in addition to the remedies set forth in the Financing Agreement, all other remedies permitted by law including the right to seek compliance by the borrower with the terms and provisions of the Financing Agreement and the related Loans or Local Governmental Obligations by suit or suits in equity or at law, for the specific performance of any covenant, term or condition of the Financing Agreement, or in the aid of the execution of any power granted in the Financing Agreement, and may exercise any other right or remedy upon such default as may be granted to the Trust under the Act, the applicable bond act or under any other applicable provision of law.

# APPENDIX D - SRF BOND PROGRAM - MTA BONDS OUTSTANDING AND BORROWERS

# **MTA Bonds Outstanding**

Date	Supplemental Trust	Series of Bonds	Original Principal	Amount Outstanding
	Agreement		Amount	
January 7, 2015	First Supplemental Agreement	Series 18 (Green Bonds)	\$228,155,000	\$205,150,000
January 11, 2016	Second Supplemental Agreement	Series 19 (Green Bonds)	207,805,000	192,210,000
April 13, 2017	Third Supplemental Agreement	Series 20 (Green Bonds)	207,350,000	200,310,000
April 13, 2017	Third Supplemental Agreement	Series 2017 (Refunding Bonds)	96,280,000	96,280,000

## **Borrowers**

The following table sets forth for each borrower under the Trust's SRF Bond program as of the date of delivery of the Bonds (i) the amount of loans expected to be outstanding securing the Prior Bonds, (ii) the amount of loans expected to be outstanding securing MTA Bonds (excluding loans securing Prior Bonds that have been refunded by MTA Bonds or defeased but including loans funded in connection with the issuance of the Bonds), (iii) the total amount of loans expected to be outstanding and (iv) the percentage that the loans to each borrower will represent of the total loans expected to be outstanding. Upon the issuance of the Bonds, approximately \$2.9 billion of the total loans are expected to be allocable to the Clean Water Federal Program and approximately \$0.9 billion of the total loans are expected to be allocable to the Drinking Water Federal Program.

	Borrower	Loans Securing Prior Bonds	Loans Securing MTA Bonds	Total Loans	% of Total Loans Outstanding
	Abington	\$2,941,771	-	\$2,941,771	0.08%
	Acton	12,943,957	-	12,943,957	0.34
	Acushnet	1,878,276	\$343,073	2,221,349	0.06
	Adams	1,112,032	-	1,112,032	0.03
*	Adams Fire District	1,283,510	538,518	1,822,028	0.05
	Agawam	612,771	-	612,771	0.02
	Amesbury	12,841,192	-	12,841,192	0.34
	Amherst	5,210	-	5,210	0.00
	Andover	2,444,268	619,798	3,064,066	0.08
	Aquarion Water Company of Massachusetts	1,040,000	-	1,040,000	0.03
	Ashburnham	304,587	-	304,587	0.01
	Ashfield Water District	45,000	-	45,000	0.00

D-1

<sup>\*</sup>Borrower has a loan included in the Bonds.

	Borrower	Loans Securing Prior Bonds	Loans Securing MTA Bonds	Total Loans	% of Total Loans Outstanding
	Ashland	\$1,283,376	-	\$1,283,376	0.03%
	Athol	3,711,049	-	3,711,049	0.10
	Attleboro	14,454,334	-	14,454,334	0.38
	Auburn	189,702	-	189,702	0.01
	Auburn Water District	1,101,572	\$2,469,046	3,570,618	0.09
	Avon	368,949	-	368,949	0.01
	Ayer	26,107	-	26,107	0.00
*	Barnstable	16,054,485	5,332,868	21,387,353	0.56
	Barnstable County	12,150,000	7,886,312	20,036,312	0.53
	Barre	15,965	55,888	71,853	0.00
	Belchertown	3,110,315	-	3,110,315	0.08
*	Bellingham	521,401	12,797,526	13,318,927	0.35
	Belmont	5,855,094	2,014,779	7,869,873	0.21
	Berlin	15,936	-	15,936	0.00
	Bernardston	9,936	-	9,936	0.00
	Beverly	225,396	-	225,396	0.01
	Billerica	15,459,080	32,448,107	47,907,187	1.26
	Blackstone	4,147	-	4,147	0.00
	Boston	855,000	13,724,492	14,579,492	0.38
	Bourne	137,685	-	137,685	0.00
	Boxford	8,135	-	8,135	0.00
	Boylston	8,623	-	8,623	0.00
	Brewster	70,600	-	70,600	0.00
	Bridgewater	1,377,328	2,926,934	4,304,262	0.11
	Bristol County	863,009	-	863,009	0.02
*	Brockton	59,074,616	11,010,138	70,084,754	1.85

	Borrower	Loans Securing Prior Bonds	Loans Securing MTA Bonds	Total Loans	% of Total Loans Outstanding
	Brockton Sewer Enterprise System	\$60,458	-	\$60,458	0.00%
	Brookfield	15,611	-	15,611	0.00
	Burlington	3,653,145	-	3,653,145	0.10
	Cambridge	4,051,588	\$20,919,431	24,971,019	0.66
	Canton	2,424,255	-	2,424,255	0.06
	Centerville-Osterville- Marstons Mills Fire District	1,542,531	-	1,542,531	0.04
	Charles River Pollution Control District	3,246,933	21,197,790	24,444,723	0.64
	Charlton	3,331,534	-	3,331,534	0.09
*	Chatham	9,413,136	15,559,816	24,972,952	0.66
	Chelmsford	20,857,515	-	20,857,515	0.55
	Chelmsford Water District	1,725,084	-	1,725,084	0.05
	Chelsea	158,566	-	158,566	0.00
	Cherry Valley & Rochdale Water District	314,217	486,673	800,890	0.02
	Chesterfield	82,707	-	82,707	0.00
*	Chicopee	64,234,085	64,725,938	128,960,023	3.39
	Clinton	2,741,112	86,668	2,827,780	0.07
	Cohasset	16,902,051	-	16,902,051	0.44
	Colrain	6,288	-	6,288	0.00
	Concord	6,856,466	138,220	6,994,686	0.18
	Conway	3,997	-	3,997	0.00
	Danvers	15,145,398	-	15,145,398	0.40
*	Dartmouth	11,259,215	9,130,633	20,389,848	0.54
	Dedham	50,000	-	50,000	0.00
	Deerfield Fire District	426,165	-	426,165	0.01
	Dennis	120,000	-	120,000	0.00
	Dennis Water District	3,908,661	-	3,908,661	0.10

D-3

	Borrower	Loans Securing Prior Bonds	Loans Securing MTA Bonds	Total Loans	% of Total Loans Outstanding
	Dighton	\$56,952	-	\$56,952	0.00%
	Dighton Rehoboth Regional School District	371,380	-	371,380	0.01
	Dighton Water District	3,049,011	-	3,049,011	0.08
	Douglas	2,429,534	-	2,429,534	0.06
	Dover	20,600	-	20,600	0.00
	Dracut	18,396,769	\$12,565,072	30,961,841	0.81
	Dracut Water Supply District	124,239	-	124,239	0.00
	Dudley	45,000	-	45,000	0.00
	Duxbury	1,758,267	-	1,758,267	0.05
	East Bridgewater	9,599,566	-	9,599,566	0.25
	East Longmeadow	252,783	-	252,783	0.01
*	Eastham	90,600	40,269,274	40,359,874	1.06
	Easthampton	2,667,848	1,055,505	3,723,353	0.10
*	Easton	4,172,909	1,829,775	6,002,684	0.16
	Erving	2,471,944	-	2,471,944	0.07
	Essex	8,203,040	-	8,203,040	0.22
	Everett	2,493,915	1,116,613	3,610,528	0.10
	Fairhaven	585,021	647,412	1,232,433	0.03
*	Fall River	108,612,432	34,415,437	143,027,869	3.77
*	Falmouth	9,748,130	71,396,838	81,144,968	2.14
*	Fitchburg	16,191,831	36,217,704	52,409,535	1.38
	Foxborough	3,039,909	-	3,039,909	0.08
	Framingham	37,067,403	7,292,571	44,359,974	1.17
	Franklin	2,119,035	-	2,119,035	0.06
	Gardner	2,104,145	4,253,914	6,358,059	0.17
	Georgetown	347,800	-	347,800	0.01

	Borrower	Loans Securing Prior Bonds	Loans Securing MTA Bonds	Total Loans	% of Total Loans Outstanding
	Gill	\$2,266	-	\$2,266	0.00%
*	Gloucester	36,459,041	\$17,442,556	53,901,597	1.42
*	Grafton	4,165	36,840,620	36,844,785	0.97
	Great Barrington	20,000	8,259,769	8,279,769	0.22
	Greater Lawrence Sanitary District	15,948,004	2,197,902	18,145,906	0.48
	Greenfield	22,023	-	22,023	0.00
	Greens Condominium Trust	-	91,050	91,050	0.00
	Groton	2,350,171	-	2,350,171	0.06
*	Hadley	2,424,812	172,998	2,597,810	0.07
	Halifax	90,600	-	90,600	0.00
	Hanover	45,000	249,900	294,900	0.01
	Hanson	762,500	607,500	1,370,000	0.04
	Harvard	2,002,368	195,985	2,198,353	0.06
	Harwich	63,312	1,721,937	1,785,249	0.05
	Hatfield	2,557	-	2,557	0.00
*	Haverhill	19,131,411	25,698,157	44,829,568	1.18
	Hillcrest Sewer District	1,051,154	-	1,051,154	0.03
	Hingham	179,700	-	179,700	0.00
	Hinsdale	1,380,000	-	1,380,000	0.04
	Holbrook	6,703,325	-	6,703,325	0.18
	Holden	4,909,044	482,065	5,391,109	0.14
	Holland	10,000	-	10,000	0.00
	Holliston	15,000	2,189,976	2,204,976	0.06
	Holyoke	12,928,829	-	12,928,829	0.34
	Hoosac Water Quality District	3,350,879	-	3,350,879	0.09
	Hopedale	416,280	-	416,280	0.01

	Borrower	Loans Securing Prior Bonds	Loans Securing MTA Bonds	Total Loans	% of Total Loans Outstanding
	Hopkinton	\$7,267,660	\$120,000	\$7,387,660	0.19%
	Hudson	12,169,559	-	12,169,559	0.32
	Hull	989,182	-	989,182	0.03
	Ipswich	2,355,549	3,644,652	6,000,201	0.16
*	Kingston	21,118,494	4,020,375	25,138,869	0.66
	Lakeville	74,448	-	74,448	0.00
	Lancaster	32,398	-	32,398	0.00
	Lanesborough Village Fire & Water District	725,000	-	725,000	0.02
	Lawrence	15,800,329	29,610,913	45,411,242	1.20
	Lee	9,395,006	-	9,395,006	0.25
	Leicester	76,516	-	76,516	0.00
	Leicester Water Supply District	156,378	-	156,378	0.00
	Leominster	22,709,704	11,068,371	33,778,075	0.89
	Lexington	4,986	-	4,986	0.00
	Lincoln	1,015,000	-	1,015,000	0.03
	Littleton	22,776	271,240	294,016	0.01
	Longmeadow	1,761,929	-	1,761,929	0.05
	Lowell	73,297,094	17,344,610	90,641,704	2.39
	Ludlow	2,937,725	462,485	3,400,210	0.09
	Lunenburg	2,881,017	1,091,883	3,972,900	0.11
	Lunenburg Water District Lynn Water & Sewer	2,435,324	-	2,435,324	0.06
	Commission	34,597,161	6,493,595	41,090,756	1.08
	Lynnfield	330,258	-	330,258	0.01
	Malden	7,571,181	10,571,761	18,142,942	0.48
	Manchester-by-the-Sea	65,000	1,571,307	1,636,307	0.04
	Mansfield	11,110,524	-	11,110,524	0.29

	Borrower	Loans Securing Prior Bonds	Loans Securing MTA Bonds	Total Loans	% of Total Loans Outstanding
	Marion	\$13,369,595	\$2,280,718	\$15,650,313	0.41%
	Marlborough	35,403,866	36,106,282	71,510,148	1.88
	Marshfield	7,215,142	170,000	7,385,142	0.19
	Mashpee	190,957	53,352	244,309	0.01
	Massachusetts Development Finance Agency	8,498,025	-	8,498,025	0.22
*	Massachusetts Water Resources Authority	746,789,070	188,958,160	935,747,230	24.63
	Mattapoisett	7,293,583	-	7,293,583	0.19
	Mattapoisett River Valley Water District	6,941,724	-	6,941,724	0.18
	Maynard	7,780,619	-	7,780,619	0.20
	Medfield	854,465	-	854,465	0.02
*	Medway	17,995	3,108,658	3,126,653	0.08
	Melrose	1,642,278	-	1,642,278	0.04
*	Merrimac	10,000	2,389,668	2,399,668	0.06
	Methuen	13,381,744	-	13,381,744	0.35
*	MFN Regional Wastewater District	7,123,251	28,000,472	35,123,723	0.92
	Middleborough	899,002	24,067,115	24,966,117	0.66
	Middleton	30,298	-	30,298	0.00
	Millbury	15,382,188	<del>-</del>	15,382,188	0.40
*	Millville	217,646	208,472	426,118	0.01
	Milton	63,443	-	63,443	0.00
	Monroe	-	138,191	138,191	0.00
	Monson	965,379	<del>-</del>	965,379	0.03
*	Montague	1,796,904	1,583,047	3,379,951	0.09
	Monterey	4,898	-	4,898	0.00
*	Nantucket	40,285,356	27,424,053	67,709,409	1.78

	Borrower	Loans Securing Prior Bonds	Loans Securing MTA Bonds	Total Loans	% of Total Loans Outstanding
	Natick	\$2,086,743	-	\$2,086,743	0.05%
	Needham	5,308,528	-	5,308,528	0.14
*	New Bedford	88,338,630	\$21,586,718	109,925,348	2.89
	Newbury	5,838,131	-	5,838,131	0.15
	Newburyport	35,767,946	259,626	36,027,572	0.95
	Newton	1,442,000	-	1,442,000	0.04
	Norfolk	233,807	-	233,807	0.01
	North Adams	127,623	-	127,623	0.00
	North Andover	3,323,410	-	3,323,410	0.09
	North Attleborough	16,619,824	9,829,443	26,449,267	0.70
	North Brookfield	365,000	-	365,000	0.01
	North Raynham Water District	2,342,303	-	2,342,303	0.06
	North Reading	140,000	-	140,000	0.00
	North Sagamore Water District	719,930	-	719,930	0.02
*	Northampton	12,957,198	86,222	13,043,420	0.34
	Northborough	84,992	-	84,992	0.00
	Northbridge	1,544,387	-	1,544,387	0.04
	Norton	1,000,650	3,157,348	4,157,998	0.11
	Norwell	57,070	-	57,070	0.00
*	Norwood	2,975,504	5,061,392	8,036,896	0.21
	Oak Bluffs	3,254,662	-	3,254,662	0.09
	Orange	260,231	-	260,231	0.01
	Orleans	35,000	-	35,000	0.00
	Palmer	4,809,080	5,320,610	10,129,690	0.27
	Paxton	15,247	1,257,960	1,273,207	0.03
	Pembroke	2,532,370	698,231	3,230,601	0.09

Borrower	Loans Securing Prior Bonds	Loans Securing MTA Bonds	Total Loans	% of Total Loans Outstanding
Pepperell	\$1,785,000	-	\$1,785,000	0.05%
Phillipston	\$15,244	-	\$15,244	0.00
Pittsfield	4,021,545	3,591,561	7,613,106	0.20
Plainville	2,449,574	606,197	3,055,771	0.08
Plymouth	9,224,838	12,048,709	21,273,547	0.56
Plympton	6,400	-	6,400	0.00
Provincetown	8,169,984	-	8,169,984	0.22
Quincy	6,923,622	6,407,304	13,330,926	0.35
Randolph	9,127,481	1,682,466	10,809,947	0.28
Raynham	2,074,123	-	2,074,123	0.06
Reading	2,308	-	2,308	0.00
Revere	9,290,116	56,527,112	65,817,228	1.73
Richmond	1,875,661	-	1,875,661	0.05
Rockland	2,436,716	-	2,436,716	0.06
Rowley	9,143,567	343,688	9,487,255	0.25
Royalston	3,432	-	3,432	0.00
Russell	160,000	-	160,000	0.00
Rutland	15,418	-	15,418	0.00
Salem	1,047,049	-	1,047,049	0.03
Salisbury	1,635,423	-	1,635,423	0.04
Sandwich	82,707	-	82,707	0.00
Saugus	7,633,243	7,957,166	15,590,409	0.41
Scituate	8,847,659	-	8,847,659	0.23
Seekonk	896,323	-	896,323	0.02
Seekonk Water District	1,062,084	-	1,062,084	0.03
Sharon	32,707	-	32,707	0.00
	Pepperell Phillipston Pittsfield Plainville Plymouth Plympton Provincetown Quincy Randolph Raynham Reading Revere Richmond Rockland Rowley Royalston Russell Rutland Salem Salisbury Sandwich Saugus Scituate Seekonk Seekonk Water District	Borrower         Prior Bonds           Pepperell         \$1,785,000           Phillipston         \$15,244           Pittsfield         4,021,545           Plainville         2,449,574           Plymouth         9,224,838           Plympton         6,400           Provincetown         8,169,984           Quincy         6,923,622           Randolph         9,127,481           Raynham         2,074,123           Reading         2,308           Revere         9,290,116           Richmond         1,875,661           Rockland         2,436,716           Rowley         9,143,567           Royalston         3,432           Rutssell         160,000           Rutland         15,418           Salem         1,047,049           Salisbury         1,635,423           Sandwich         82,707           Saugus         7,633,243           Scekonk         896,323           Seekonk Water District         1,062,084	Borrower         Prior Bonds         MTA Bonds           Pepperell         \$1,785,000         -           Phillipston         \$15,244         -           Pittsfield         4,021,545         3,591,561           Plainville         2,449,574         606,197           Plymouth         9,224,838         12,048,709           Plympton         6,400         -           Provincetown         8,169,984         -           Quincy         6,923,622         6,407,304           Randolph         9,127,481         1,682,466           Raynham         2,074,123         -           Reading         2,308         -           Revere         9,290,116         56,527,112           Richmond         1,875,661         -           Rockland         2,436,716         -           Rowley         9,143,567         343,688           Royalston         3,432         -           Russell         160,000         -           Rutland         15,418         -           Salem         1,047,049         -           Salisbury         1,635,423         -           Sandwich         82,707         - <td>Borrower         Prior Bonds         MTA Bonds         Total Loans           Pepperell         \$1,785,000         -         \$1,785,000           Phillipston         \$15,244         -         \$15,244           Pittsfield         4,021,545         3,591,561         7,613,106           Plainville         2,449,574         606,197         3,055,771           Plymouth         9,224,838         12,048,709         21,273,547           Plympton         6,400         -         6,400           Provincetown         8,169,984         -         8,169,984           Quincy         6,923,622         6,407,304         13,330,926           Randolph         9,127,481         1,682,466         10,809,947           Raynham         2,074,123         -         2,074,123           Reading         2,308         -         2,308           Revere         9,290,116         56,527,112         65,817,228           Richmond         1,875,661         -         1,875,661           Rowley         9,143,567         343,688         9,487,255           Royalston         3,432         -         3,432           Russell         160,000         -         160,000</td>	Borrower         Prior Bonds         MTA Bonds         Total Loans           Pepperell         \$1,785,000         -         \$1,785,000           Phillipston         \$15,244         -         \$15,244           Pittsfield         4,021,545         3,591,561         7,613,106           Plainville         2,449,574         606,197         3,055,771           Plymouth         9,224,838         12,048,709         21,273,547           Plympton         6,400         -         6,400           Provincetown         8,169,984         -         8,169,984           Quincy         6,923,622         6,407,304         13,330,926           Randolph         9,127,481         1,682,466         10,809,947           Raynham         2,074,123         -         2,074,123           Reading         2,308         -         2,308           Revere         9,290,116         56,527,112         65,817,228           Richmond         1,875,661         -         1,875,661           Rowley         9,143,567         343,688         9,487,255           Royalston         3,432         -         3,432           Russell         160,000         -         160,000

	Borrower	Loans Securing Prior Bonds	Loans Securing MTA Bonds	Total Loans	% of Total Loans Outstanding
	Shirley	\$2,098,489	-	\$2,098,489	0.06%
*	Shrewsbury	848,163	\$15,409,946	16,258,109	0.43
	Shutesbury	105,149	-	105,149	0.00
	Somerset	3,672,899	-	3,672,899	0.10
	South Deerfield Water Supply District South Essex Sewerage	280,000	-	280,000	0.01
	District	3,636,918	7,555,592	11,192,510	0.30
	South Grafton Water District	1,166,013	-	1,166,013	0.03
	South Hadley	2,668,667	-	2,668,667	0.07
	South Hadley Fire District #1	424,488	-	424,488	0.01
	Southampton	470,600	-	470,600	0.01
	Southborough	394,319	-	394,319	0.01
	Southbridge	8,158,493	-	8,158,493	0.22
	Southwick	6,325	-	6,325	0.00
	Spencer	4,407,204	-	4,407,204	0.12
	Springfield Water & Sewer Commission	40,628,529	59,117,457	99,745,986	2.63
	Sterling	503,701	-	503,701	0.01
	Stockbridge	3,543,266	1,727,189	5,270,455	0.14
	Stoughton	1,157,921	347,500	1,505,421	0.04
	Stow	336,507	-	336,507	0.01
	Sturbridge	10,742,984	-	10,742,984	0.28
	Sunderland	5,063	-	5,063	0.00
	Sutton	3,025,511	-	3,025,511	0.08
	Swampscott	187,562	-	187,562	0.00
	Swansea	131,278	-	131,278	0.00
	Swansea Water District	11,064,092	-	11,064,092	0.29
*	Taunton	55,981,654	30,736,923	86,718,577	2.28

	Borrower	Loans Securing Prior Bonds	Loans Securing MTA Bonds	Total Loans	% of Total Loans Outstanding
	Templeton	\$2,657,796	-	\$2,657,796	0.07%
	Tewksbury	3,230,386	-	3,230,386	0.09
	Tisbury	2,204,517	\$80,562	2,285,079	0.06
	Townsend	857,850	-	857,850	0.02
	Truro	20,600	-	20,600	0.00
	Turners Falls Fire District	-	715,735	715,735	0.02
	Tyngsborough	402,205	-	402,205	0.01
*	Upper Blackstone Water Pollution Abatement District	116,611,819	8,842,079	125,453,898	3.30
*	Uxbridge	-	45,857,124	45,857,124	1.21
	Wakefield	703,290	-	703,290	0.02
	Walpole	2,550,038	-	2,550,038	0.07
	Waltham	1,457,524	-	1,457,524	0.04
	Wareham	16,672,748	285,792	16,958,540	0.45
	Warren Water District	80,000	-	80,000	0.00
	Water Supply District of Acton	-	11,800,263	11,800,263	0.31
	Wayland	120,539	-	120,539	0.00
	Webster	6,730,708	4,144,665	10,875,373	0.29
	Wellfleet	345,000	175,198	520,198	0.01
	West Boylston	5,071,877	-	5,071,877	0.13
	West Boylston Water District	577,272	-	577,272	0.02
	West Bridgewater West Groton Water Sewer	400,738	132,663	533,401	0.01
	District	665,766	-	665,766	0.02
	West Newbury	94,888	-	94,888	0.00
	West Springfield	6,761,558	496,146	7,257,704	0.19
	West Stockbridge	60,000	-	60,000	0.00
	Westborough	33,626,056	356,904	33,982,960	0.90

	Borrower	Loans Securing Prior Bonds	Loans Securing MTA Bonds	Total Loans	% of Total Loans Outstanding
	Westfield	\$6,191,176	\$2,059,359	\$8,250,535	0.22%
	Westford	4,757,177	-	4,757,177	0.13
*	Westminster	-	512,500	512,500	0.01
*	Westport	-	250,000	250,000	0.01
	Weymouth	23,845,861	-	23,845,861	0.63
	Whitman	1,984,724	-	1,984,724	0.05
	Wilbraham	2,456,688	-	2,456,688	0.07
	Wilmington	125,765	-	125,765	0.00
	Winchendon	3,799,111	-	3,799,111	0.10
	Windbrook Acres	90,000	-	90,000	0.00
	Woburn	9,143,988	-	9,143,988	0.24
	Woodvale Condominium Trust	-	107,528	107,528	0.00
	Worcester	4,303,620	3,934,852	8,238,472	0.22
	Wrentham	1,213,399	-	1,213,399	0.03
	Yarmouth	20,600	-	20,600	0.00
	Total	\$2,535,908,833	\$1,263,450,289	\$3,799,359,122	100.00%
	Clean Water Program	\$1,986,258,562	\$867,871,578	\$2,854,130,140	
	Drinking Water Program	\$549,650,271	\$395,578,711	\$945,228,982	

D-12

#### APPENDIX E - PROPOSED FORM OF OPINION OF BOND COUNSEL



Massachusetts Clean Water Trust

28 State Street Boston, MA 02109-1775 p: 617-345-9000 f: 617-345-9020 hinckleyallen.com

[Delivery Date of Bonds]

3 Cente	er Plaza	
Boston	, Massachusetts	02108
Re:	\$	Massachusetts Clean Water Trust, State Revolving Fund Bonds, Series 21 (Green
Bonds)	, Dated the Date	of Delivery

We have acted as bond counsel to the Massachusetts Clean Water Trust (the "Trust") in connection with the issuance by the Trust of the above-referenced bonds (the "Bonds"). In such capacity we have examined the law and such certified proceedings and other papers as we have deemed necessary to render this opinion, including Chapter 29C of the Massachusetts General Laws, as amended, and other applicable statutes. We have also examined the Master Trust Agreement between the Trust and U.S. Bank, National Association, as trustee (the "Trustee") dated as of January 1, 2015, as supplemented by the First Supplemental Agreement between the Trust and the Trustee dated as of January 1, 2015, the Second Supplemental Trust Agreement between the Trust and the Trustee dated as of April 1, 2017 and the Fourth Supplemental Agreement between the Trust and the Trustee dated as of September 1, 2018 (the "Fourth Supplemental Agreement" and the Master Trust Agreement as amended through the Fourth Supplemental Agreement, the "Trust Agreement").

As to questions of fact material to our opinion, we have relied on the certified proceedings and other certifications of public officials furnished to us in connection with the Bonds, without undertaking to verify the same by independent investigation. Capitalized terms used but not otherwise defined herein have the respective meanings ascribed thereto in the Trust Agreement.

Based on our examination, we are of the opinion, under existing law, that:

- 1. The Trust is duly created and validly existing as a public instrumentality of The Commonwealth of Massachusetts with the power to enter into the Fourth Supplemental Agreement, to perform the agreements on its part contained therein and to issue the Bonds.
- 2. The Bonds have been duly authorized, executed and delivered by the Trust and are valid and binding special obligations of the Trust, payable solely from the sources provided therefor in the Trust Agreement. The Trust Agreement creates a valid lien on the Revenues and other funds pledged under the Trust Agreement for the security of the Bonds, subject to the application of such amounts to the purposes and on the conditions permitted under the Trust Agreement.

Massachusetts Clean Water Trust [Dated Closing Date] Page 2

- 3. The Fourth Supplemental Agreement has been duly and lawfully authorized, executed and delivered, is in full force and effect and is a valid and binding agreement of the Trust enforceable upon the Trust in accordance with the terms thereof.
- 4. Interest on the Bonds is excluded from the gross income of the Bondowners for federal income tax purposes. In addition, interest on the Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes. However, such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income for taxable years beginning before January 1, 2018. In rendering the opinions set forth in this paragraph, we have assumed compliance with all applicable requirements of the Internal Revenue Code of 1986 that must be satisfied subsequent to the issuance of the Bonds in order that interest thereon be, and continue to be, excluded from gross income for federal income tax purposes. Failure to comply with certain of such requirements may cause interest on the Bonds to become included in gross income for federal income tax purposes retroactive to the date of issuance of the Bonds. We express no opinion regarding any other federal tax consequences arising with respect to the Bonds.
- 5. Interest on the Bonds and any profit made on the sale thereof are exempt from Massachusetts personal income taxes, and the Bonds are exempt from Massachusetts personal property taxes. We express no opinion regarding any other Massachusetts tax consequences arising with respect to the Bonds or any tax consequences arising with respect to the Bonds under the laws of any state other than Massachusetts.

This opinion is expressed as of the date hereof, and we neither assume nor undertake any obligation to update, revise, supplement or restate this opinion to reflect any action taken or omitted, or any facts or circumstances or changes in law or in the interpretation thereof, that may hereafter arise or occur, or for any other reason.

The rights of Bondowners and the enforceability of the Bonds may be subject to bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting creditors' rights heretofore or hereafter enacted to the extent constitutionally applicable, and their enforcement may also be subject to the exercise of judicial discretion in appropriate cases.

Hinckley, Allen & Snyder LLP

#### APPENDIX F - SUMMARY OF CONTINUING DISCLOSURE UNDERTAKINGS

#### A. Trust Continuing Disclosure Certificate

The Trust will execute and deliver a Continuing Disclosure Certificate (the "Disclosure Certificate") upon issuance of the Bonds. The Disclosure Certificate will be executed and delivered by the Trust for the benefit of the registered owners, including beneficial owners, of the Bonds (the "owners") and in order to assist the Underwriters of the Bonds in complying with Rule 15c2-12 adopted by the Securities and Exchange Commission (the "SEC") under the Securities Exchange Act of 1934 (the "Rule").

## **Provision of Annual Reports**

Not later than 270 days after the end of each fiscal year of the Trust, commencing with the fiscal year ending June 30, 2018, the Trust will provide an Annual Report containing the information described below to the Municipal Securities Rulemaking Board (the "MSRB") through its Electronic Municipal Market Access ("EMMA") system pursuant to the Rule. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may cross-reference other information as provided in the Disclosure Certificate. If the Trust is unable to provide an Annual Report to the MSRB by the foregoing date, the Trust will send a notice to that effect to the MSRB.

The Trust's Annual Report will contain or incorporate by reference (i) the most recently available audited financial statements of the Trust, prepared in accordance with generally accepted accounting principles and (ii) updated financial and operating information, updated through the Trust's prior fiscal year, relating to the information regarding the borrowers under the Trust's SRF Bond program and the debt obligations of such borrowers to the Trust under the SRF Bond program in substantially the same level of detail as found in Appendix D to the Official Statement in the table entitled "SRF Bond Program – Borrowers." If audited financial statements for the preceding fiscal year are not available when the Annual Report is submitted, the Annual Report will include unaudited financial statements for the preceding fiscal year and the Trust will provide the audited financial statements as soon as practicable after the audited financial statements become available. The financial statements may be incorporated by reference from other documents, including official statements of debt issues of the Trust or related public entities, which (i) are available to the public on the MSRB Internet Web site, or (ii) have been filed with the Securities and Exchange Commission. The Trust will clearly identify each such other document so incorporated by reference.

As noted in this Official Statement under the caption "CONTINUING DISCLOSURE," each Borrower will agree in its Financing Agreement to provide an annual report to the Trust, containing or incorporating the most recently available audited financial statements of such Borrower, not later than 270 days after the close of each fiscal year during any period during which such Borrower is an "obligated person" with respect to the Bonds within the meaning of the Rule, as evidenced by a notice to that effect furnished to the Borrower by the Trust. In accordance with a standard adopted by the Trust pursuant to the Rule, a Borrower shall be considered an "obligated person" with respect to the Bonds if the aggregate principal amount of all of its SRF Bond program Borrower Obligations outstanding as of the end of any fiscal year constitutes twenty percent (20%) or more of the aggregate principal amount of all SRF Bond program Borrower Obligations outstanding as of the end of such fiscal year. The Trust will covenant in its Disclosure Certificate to annually determine if any Borrowers constitute obligated persons with respect to the Bonds, and to provide notice to those Borrowers, if any, which satisfy that standard, and to file any annual reports received from such Borrowers with the MSRB at the same time and in the same manner as the Trust Annual Report for that year.

Also as noted in this Official Statement under the caption "CONTINUING DISCLOSURE," the Commonwealth has covenanted under the Commonwealth Assistance Contract to provide annual financial information and operating data, not later than 270 days after the close of each fiscal year during any period during which the Commonwealth is an "obligated person" with respect to the Bonds within the meaning of the Rule, as evidenced by a notice to that effect furnished to the Commonwealth by the Trust. In accordance with a standard adopted by the Trust pursuant to the Rule, the Commonwealth shall be considered an "obligated person" with respect to the Bonds if twenty percent (20%) or more of the debt service on all of the Trust's outstanding SRF Bonds in any fiscal year is expected to be paid with Contract Assistance Payments. Pursuant to this standard, as of the date of issuance of the Bonds, the Commonwealth is not considered an obligated person with respect to the Bonds. The Trust will covenant in its Disclosure Certificate to annually determine if the Commonwealth constitutes an obligated person with respect to the Bonds, and to provide notice to the Commonwealth if it satisfies that standard.

## **Reporting of Significant Events**

In a timely manner, not in excess of ten business days after the occurrence of any of the following events with respect to the Bonds, the Trust will file a notice of such occurrence with the MSRB.

- 1. principal and interest payment delinquencies;
- 2. non-payment related defaults, if material;
- 3. unscheduled draws on debt service reserves reflecting financial difficulties;
- 4. unscheduled draws on credit enhancements reflecting financial difficulties;
- 5. substitution of credit or liquidity providers, or their failure to perform;
- 6. adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;
- 7. modifications to the rights of security holders, if material;
- 8. (i) bond calls, if material, and (ii) tender offers;
- 9. defeasances:
- 10. release, substitution or sale of property securing repayment of the Bonds, if material;
- 11. rating changes;
- bankruptcy, insolvency, receivership or similar event of the Trust or any other "obligated person" with respect to the Bonds\*;
- 13. the consummation of a merger, consolidation, or acquisition or the sale of all or substantially all of the assets of the Trust, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and
- 14. appointment of a successor or additional trustee or the change of name of a trustee, if material.

## **Termination of Reporting Obligation**

The Trust's obligations under the Disclosure Certificate will terminate upon the defeasance of the Bonds in accordance with the terms of the Bond Resolution or the prior redemption or payment in full of all of the Bonds.

As noted in the Rule, this event is considered to occur when any of the following occur: (i) the appointment of a receiver, fiscal agent or similar officer for the Trust or any other "obligated person" with respect to the Bonds in a proceeding under the U.S. Bankruptcy Code or in any proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of such "obligated person," or if such jurisdiction has been assumed by leaving the existing governing body and officials in possession but subject to the supervision and orders of a court or governmental authority, or (ii) the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of such "obligated person."

#### Amendment

Notwithstanding any other provision of the Disclosure Certificate, the Trust may amend the Disclosure Certificate, and any provision of the Disclosure Certificate may be waived if such amendment or waiver is permitted by the Rule, as evidenced by an opinion of counsel expert in federal securities law, which may also include bond counsel to the Trust, to the effect that such amendment or waiver would not cause the Disclosure Certificate to violate the Rule. The first Annual Report filed after enactment of any amendment to the Disclosure Certificate shall explain, in narrative form, the reasons for the amendment and the impact of the change in the type of information being provided in the Annual Report.

If the amendment pertains to the accounting principles to be followed in preparing financial statements, the Annual Report for the year in which the change is made shall present a comparison between the financial statements or information prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles. The comparison shall include a qualitative discussion of the differences in the accounting principles and the impact of the change in the accounting principles on the presentation of the financial information in order to evaluate the ability of the Trust to meet its obligations. To the extent reasonably feasible, the comparison also will be quantitative. A notice of the change in the accounting principles will be sent to the MSRB.

## **Default**

In the event of a failure of the Trust to comply with any provision of the Disclosure Certificate any owner of the Bonds may seek a court order for specific performance by the Trust of its obligations under the Disclosure Certificate. Similarly, either the Trust or any owner of the Bonds may seek a court order for specific performance by any Borrower which is an "obligated person" with respect to the Bonds within the meaning of the Rule of such Borrower's disclosure obligations under the Financing Agreement and its financing closing certificate in the event of the failure of such Borrower to comply with those obligations.

A default under the Disclosure Certificate shall not constitute an Event of Default under the Master Trust Agreement or a default with respect to the Bonds, and the sole remedy under the Disclosure Certificate in the event of any failure of the Trust to comply with the Disclosure Certificate shall be an action for specific performance of the Trust's obligations thereunder and not for money damages in any amount. Similarly, a default by any Borrower of its disclosure obligations under the applicable Financing Agreement and such Borrower's closing certificate shall not constitute an event of default under the Financing Agreement, and the sole remedy for such default shall be an action for specific performance of the Borrower's obligations.

## Beneficiaries

The Disclosure Certificate will inure solely to the benefit of the owners of the Bonds from time to time, and shall create no rights in any other person or entity.

# B. The Massachusetts Water Resources Authority Continuing Disclosure Agreement

Prior to the issuance of the Bonds, the MWRA will undertake for the benefit of the owners of the Bonds to provide certain continuing disclosure in accordance with its Continuing Disclosure Agreement dated November 21, 1995, which has been previously supplemented (as supplemented, the "MWRA Continuing Disclosure Agreement") between the MWRA and State Street Bank and Trust Company, predecessor in interest to U.S. Bank National Association, as Dissemination Agent (the "Dissemination Agent").

## **Annual Filings**

Pursuant to the MWRA Continuing Disclosure Agreement, not later than January 1 of each year, commencing January 1, 1998, the MWRA will, or will cause the Dissemination Agent to, provide an Annual Filing (as described below) to the MSRB through EMMA. The Annual Filing may be submitted as a single document or as separate documents comprising a package, and may cross-reference other information as provided in the MWRA Continuing Disclosure Agreement. If the Dissemination Agent determines that the MWRA has failed to comply with the undertaking regarding the Annual Filing, the Dissemination Agent will send a notice to that effect in a timely manner to the MSRB through EMMA.

The MWRA's Annual Filing will contain or incorporate by reference the following:

- (a) quantitative information for, or as of the end of, the preceding fiscal year of the type presented in the MWRA's most recent official statement, including (i) a summary table of revenues, expenses and fund deposits, (ii) the amount of outstanding indebtedness of the MWRA, and the debt limit as of the end of the fiscal year, (iii) a summary table with respect to the coverage covenants in the MWRA's General Resolution and (iv) a summary table showing the MWRA's capital investments by major category during the preceding fiscal year;
- (b) quantitative information for the current fiscal year of the type presented in the MWRA's most recent official statement, including (i) a table of the MWRA's current water and wastewater charges by Local Body, (ii) the current expense budget's rate revenue requirement and the percentage increases for water and wastewater over the prior fiscal year and (iii) executive summaries of the MWRA's most recently adopted current expense budget and capital improvement program; and
- (c) the most recently available audited financial statements of the MWRA, prepared in accordance with accounting principles generally accepted in the United States of America. (If audited financial statements for the preceding fiscal year are not available when the Annual Filing is submitted, the Annual Filing will include unaudited financial statements for the preceding fiscal year.)

Any or all of the items listed above may be incorporated by reference from other documents, including official statements of debt issues of the MWRA or related public entities, which have been submitted to EMMA or the Securities and Exchange Commission. If the document incorporated by reference is a final official statement, it must be available from the MSRB.

Pursuant to the MWRA Continuing Disclosure Agreement, the MWRA will also undertake to provide in a timely manner to the MSRB through EMMA and to the SID, if any, notice of certain enumerated events, including any change in the credit rating of outstanding bonds issued by the MWRA.

## **Termination of Reporting Obligation**

The MWRA's and Dissemination Agent's obligations under the MWRA Continuing Disclosure Agreement to the owners of the Bonds will terminate upon the defeasance, prior redemption or payment in full of the Bonds.

## Amendment; Waiver

Notwithstanding any other provision of the MWRA Continuing Disclosure Agreement, the MWRA and the Dissemination Agent may amend the MWRA Continuing Disclosure Agreement, and any provision of the MWRA Continuing Disclosure Agreement may be waived, if such amendment or waiver is permitted by the Rule, as evidenced by an opinion of counsel expert in federal securities laws, acceptable to both the MWRA and the Dissemination Agent, to the effect that such amendment or waiver would not, in and of itself, cause the MWRA's undertakings to violate the Rule if such amendment or waiver had been effective on the date hereof but taking into account any subsequent change in or official interpretation of the Rule.

If the amendment provides for a change in the accounting principles to be followed in preparing financial statements, the Annual Filing for the year in which the change is made shall present a comparison between the financial statements or information prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles. The comparison shall include a qualitative discussion of the differences in the accounting principles and the impact of the change in the accounting principles on the presentation of the financial information in order to provide information to investors to enable them to evaluate the ability of the MWRA to meet its obligations. To the extent reasonably feasible, the comparison shall also be quantitative. A notice of the change in the accounting principles shall be sent to each Repository.

## **Default**

In the event of a failure of the MWRA or the Dissemination Agent to comply with any provision of the MWRA Continuing Disclosure Agreement, the Dissemination Agent may (and, at the request of any of the owners of at least 25% aggregate principal amount outstanding of the Bonds, shall), or any owner of the Bonds may, seek a court order for specific performance by the MWRA or Dissemination Agent, as the case may be, of its obligations under the MWRA Continuing Disclosure Agreement. A default under the MWRA Continuing Disclosure Agreement shall not be deemed

an Event of Default under the MWRA's General Resolution or under the Trust's Master Trust Agreement, and the sole remedy under the MWRA Continuing Disclosure Agreement in the event of any failure of the MWRA or the Dissemination Agent to comply with the MWRA Continuing Disclosure Agreement shall be an action to compel performance of the defaulting party's obligations thereunder and not for money damages in any amount.

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#### APPENDIX G - THE DEPOSITORY TRUST COMPANY

## **Book-Entry Only System**

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

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

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

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

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

Redemption notices shall be sent to DTC. If less than all of a particular maturity of the Bonds is being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity to be redeemed, unless other arrangements are made between DTC and the Trust.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Trust as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s

consenting or voting rights to those Direct Participants to whose accounts the Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

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

The information in this Appendix G concerning DTC and DTC's book-entry system has been obtained from sources that the Trust believes to be reliable, but the Trust takes no responsibility for the accuracy thereof.

## No Responsibility of the Trust, the Master Trustee or Paying Agent

NONE OF THE TRUST, THE PAYING AGENT OR THE MASTER TRUSTEE WILL HAVE ANY RESPONSIBILITY OR OBLIGATIONS TO DIRECT PARTICIPANTS OR THE PERSONS FOR WHOM THEY ACT AS NOMINEES WITH RESPECT TO THE PAYMENTS TO OR THE PROVIDING OF NOTICE FOR DIRECT PARTICIPANTS, INDIRECT PARTICIPANTS, OR BENEFICIAL OWNERS.

SO LONG AS CEDE & CO. IS THE REGISTERED OWNER OF THE BONDS, AS NOMINEE OF DTC, REFERENCES HEREIN TO THE BONDOWNERS OR REGISTERED OWNERS OF THE BONDS SHALL MEAN CEDE & CO. AND SHALL NOT MEAN THE BENEFICIAL OWNERS OF THE BONDS.

#### **Certificated Bonds**

DTC may discontinue providing its services as securities depository with respect to the Bonds at any time by giving reasonable notice to the Trust and the Master Trustee. In addition, the Trust may determine that continuation of the system of book-entry transfers through DTC (or a successor securities depository) is not in the best interests of the Beneficial Owners. If for either reason the Book-Entry Only system is discontinued, Bond certificates will be delivered as described in the Master Trust Agreement and the Supplemental Trust Agreement and the Beneficial Owner, upon registration of certificates held in the Beneficial Owner's name, will become the Bondowner. Thereafter, Bonds may be exchanged for an equal aggregate principal amount of Bonds in other authorized denominations and of the same maturity, upon surrender thereof at the principal corporate trust office of the Master Trustee. The transfer of any Bond may be registered on the books maintained by the Master Trustee for such purpose only upon the assignment in the form satisfactory to the Master Trustee. For every exchange or registration of transfer of Bonds, the Trust and the Master Trustee may make a charge sufficient to reimburse them for any tax or other governmental charge required to be paid with respect to such exchange or registration of transfer, but no other charge may be made to the Bondowner for any exchange or registration of transfer of the Bonds. The Trust will not be required to transfer or exchange any Bond during the notice period preceding any redemption if such Bond or any part thereof is eligible to be selected or has been selected for redemption.

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#### APPENDIX H - PRIOR BONDS AND PRIOR RESOLUTIONS

The Trust previously administered its SRF Programs pursuant to its "Amended and Restated Resolution Authorizing and Establishing a Water Pollution Abatement and Drinking Water Project Financing Program" adopted on March 4, 1993, as amended and supplemented (the "Program Resolution") pursuant to which it issued bonds under several bond resolutions, including for its Prior Pool Bonds and its Prior Single Obligor Bonds (each as defined in the front part of this Official Statement, and, collectively, the "Prior Bonds"). Each series of Prior Bonds was issued pursuant to a separate bond resolution (collectively, the "Prior Bond Resolutions" and together with the "Program Resolution," the "Prior Resolutions"). The most significant of these programs was its Pool Program, under which Prior Pool Bonds are outstanding under the clean water SRF and the drinking water SRF in the approximate principal amounts of \$1.3 billion and \$445.5 million, respectively. Capitalized terms used herein and not otherwise defined shall have the meaning set forth in the front part of this Official Statement or in Appendix A- "Definitions of Certain Terms."

The Prior Bonds are special obligations of the Trust and do not constitute a pledge of its full faith and credit. The Prior Bonds are payable solely from the funds pledged therefor pursuant to the Program Resolution and the applicable Prior Bond Resolution.

With the establishment of the Master Trust Agreement in 2015, the Trust closed its Program Resolution, and will not issue any additional bonds secured by the Program Resolution, except for refunding bonds with debt service requirements less than or equal to the debt service requirements on the refunded bonds in each fiscal year. As funds become available in the Deficiency Fund held under the Program Resolution, the Program Trustee will promptly transfer such amounts to the Master Trustee to be held in the applicable Equity Fund under the Master Trust Agreement, and applied as provided therein. See "Security under the Program Resolution" and "Releases to the Equity Funds" below.

## Sources of Payment and Security for the Prior Bonds

#### **Sources of Payment**

The debt service on the Prior Bonds is expected to be paid from a combination of three sources: (i) Borrower Payments ("Prior Borrower Payments") on Loans funded by the Prior Bonds ("Prior Loans"); (ii) interest payments on Loans funded by the Trust's SRF Program Funds which were pledged to a particular series of Prior Bonds ("Prior Pledged Direct Loans"), or earnings on debt service reserve funds established for such Prior Bonds in the applicable Prior Bond Resolution, or a combination thereof; and (iii) payments provided by the Commonwealth pursuant to the Act and the Commonwealth Assistance Contract and interest earnings, if any, thereon. The related Prior Borrower Payments, interest payments on any applicable Prior Pledged Direct Loans, if any, applicable reserve fund earnings, if any, Contract Assistance Payments and other moneys expected to be available to pay the debt service on such Prior Bonds are in the aggregate at least sufficient to pay debt service on the Prior Bonds when due.

- Loan Repayments. Each Borrower is obligated to repay the principal amount of its Prior Loan at an interest rate of 2% or less, depending on the subsidy level to which each Borrower is entitled. Certain Borrowers with loan terms greater than 20 years may have an interest rate in excess of 2% in order to provide sufficient cash flow to pay the net additional interest expense on the related Prior Bonds that results from extending the term of the financing beyond 20 years. Payments on the Prior Loans are due to the Trust fifteen (15) days in advance of debt service payments on the related series of Prior Bonds. Along with certain other Commonwealth agencies, the Trust has the right to intercept local aid payments made by the Commonwealth to a city or town if such city or town fails to make its payments under its financing agreement as described more fully in the Official Statement. See "SECURITY FOR THE BORROWER OBLIGATIONS" in the front part of this Official Statement for a description of the security and sources of payment for the local bonds issued by the Borrowers.
- Other Payments. In addition to receiving the Prior Borrower Payments, the Trust receives (i) interest payments on applicable Prior Pledged Direct Loans, if any, (ii) earnings on reserve funds, if any, or (iii) a combination thereof. Depending on the type of projects being financed, the terms of the Prior Loans to the borrowers and the subsidy levels to which the borrowers were entitled, the Trust applied its SRF Program Funds to fund Prior Pledged Direct Loans, a reserve fund or both in an aggregate amount equal to between 33% and 50% of the original principal amount of the related Prior Loans.

• Investment of Reserve Funds. To assure the receipt of investment earnings in amounts and at times sufficient to provide adequate reserve fund earnings to pay debt service on the related series of Prior Bonds, the Trust (i) entered into investment agreements with one or more investment agreement providers or (ii) invested amounts in the debt service reserve fund in other investment obligations with terms sufficient to maintain the ratings on the related series of Prior Bonds. The investment agreements are general obligations of the related providers. The providers, however, do not guarantee payment of any portion of the principal of or interest on the related series of Prior Bonds.

Such investment agreements are with providers (or a guarantor of such providers' obligations) rated at the time of execution of such agreements at least "AA-" by Standard & Poor's Ratings Services, a division of The McGraw-Hill Companies, Inc. ("Standard & Poor's") and "Aa3" by Moody's Investors Services, Inc. ("Moody's"). See "Debt Service Reserve Fund Investment Providers" below for additional information regarding the specific investment agreements relating to the Prior Bonds. Each investment agreement required that the obligations of the provider be collateralized either upon execution of such agreement or, unless other remedial action is taken, upon the occurrence of certain events, and at all times thereafter, by securities or other obligations issued or guaranteed by the United States, by certain federal agencies or corporations or, in some cases, by corporate or municipal issuers rated "AAA" by Standard & Poor's and "Aaa" by Moody's, at the time of delivery of such collateral with a market value sufficient to ensure that there is no adverse effect on the ratings on the related Prior Bonds. The collateral securities, if any, are held by the related Prior Bond trustee or a third-party collateral agent for the account of such trustee and may be liquidated by the Prior Bond trustee upon any payment default by a provider under the related investment agreement. Upon any payment default by a provider, such provider is obligated to reimburse the Trust (either directly or through the sale of collateral) for any unpaid principal and accrued interest on the investment agreement and for any loss realized by the Trust upon reinvestment.

• Contract Assistance Payments. Pursuant to the Act and the Amended and Restated Agreement for Contract Assistance dated as of February 11, 2016 (the "Commonwealth Assistance Contract") between the Trust and the State Treasurer, the Commonwealth makes payments to the Trust on behalf of certain borrowers to provide for a portion of the debt service subsidy on loans. Such payments together with investment earnings thereon are applied to pay a portion of the debt service on the related series of Prior Bonds.

The obligation of the Commonwealth under the Commonwealth Assistance Contract to provide Contract Assistance Payments to the Trust constitutes a general obligation of the Commonwealth, for which its full faith and credit are pledged. The Commonwealth Assistance Contract is pledged under the Program Resolution to the Program Trustee for the benefit of all holders of the Prior Bonds, and the Contract Assistance Payments are pledged, upon receipt, under the applicable Prior Bond Resolutions. In addition, the Trust has covenanted in the Prior Bond Resolutions to enforce the terms of the Commonwealth Assistance Contract as they pertain to the applicable series of Prior Bonds.

Payments under the Commonwealth Assistance Contract are made during the first twenty years of the term of the applicable series of Prior Bonds. For certain Prior Bonds with a term greater than twenty years, portions of the Contract Assistance Payments received in the first twenty years are deposited in a subsidy fund held under the related bond resolution and, in certain cases, invested in investment agreements or other instruments with provisions similar to those described above for the investment of reserve funds. The amounts deposited in the subsidy funds and the related investment earnings are used to pay debt service on the related Prior Bonds after the first twenty years.

Bonds as "build America bonds" ("BABs") for purposes of the American Recovery and Reinvestment Act of 2009 ("ARRA") and is thereby entitled to receive cash subsidy payments from the United States Treasury ("Federal Subsidy Payments") equal to 35% of the interest payable on the Series 15B Bonds provided it makes certain required filings in accordance with applicable federal rules pertaining to the Federal Subsidy Payments. Receipt of Federal Subsidy Payments by the Trust has been and will be adversely affected by implementation of certain provisions of the federal Budget Control Act of 2011 (the "Budget Control Act"), that was signed into law by the President on August 2, 2011. The Joint

Select Committee on Deficit Reduction failed to reach an agreement on the deficit reduction actions as required by the Budget Control Act and, as a result, sequestration—a unique budgetary feature of the Budget Control Act—has been triggered. The Internal Revenue Service notifies the Trust of any reduction in direct pay subsidies for the Trust's outstanding BABs. To date, the Trust has received reductions to its Federal Subsidy Payments of 8.7%, 7.2%, 7.3%, 6.8%, 6.9% and 6.6% for Federal Subsidy Payments due in federal fiscal years 2013, 2014, 2015, 2016, 2017 and 2018, respectively. Accordingly, the Trust requested and received and expects to continue to receive additional Contract Assistance Payments to make up for the shortfall caused by the reduction in Federal Subsidy Payments. The Trust is obligated to make payments of the principal and interest on the Series 15B Bonds whether or not it receives Federal Subsidy Payments.

## Security for the Prior Bonds - Prior Pledged Direct Loans and SRF Reserve Funds

Under the applicable bond resolution, each series of Prior Bonds is secured by (i) the related Prior Borrower Payments, (ii) Contract Assistance Payments allocable to the Prior Bonds and (iii) either the related Prior Pledged Direct Loan borrower loan repayments or the reserve funds established for such Prior Bonds or a combination thereof. Certain refunding bonds previously issued by the Trust are not secured by a reserve fund under the applicable bond resolution, and the Trust's 2004 Refunding Bonds and 2014 Refunding Bonds (each as defined below) are secured by a bond-funded reserve fund.

Prior Pool Bonds are further secured by the Pool Program Reserve Fund and all Prior Bonds are further secured by the Deficiency Fund, both held under the Program Resolution, all as further described below.

## Additional security under the applicable Prior Bond Resolution

- **Prior Pledged Direct Loans.** Upon the issuance of certain of the Prior Pool Bonds, the Trust pledged repayments on the applicable Prior Pledged Direct Loans to provide additional security for such Prior Pool Bonds. The principal repayments on such Prior Pledged Direct Loans will be available to cure or prevent any default in the payment of debt service on the related series of Prior Pool Bonds. On each date that the Trust pays down the principal amount of the related series of Prior Pool Bonds, principal repayments on the Prior Pledged Direct Loans that are not needed to cure or prevent a default on such Prior Pool Bonds will be transferred to the Pool Program Reserve Fund, and then to the Deficiency Fund, each held under the Program Resolution, as described below.
- Reserve Funds. Upon the issuance of certain of the Prior Bonds, the Trust used SRF Program Funds to fund a reserve fund for such series of Prior Bonds to provide additional security for such Prior Bonds. Such reserve funds are available to cure or prevent any default in the payment of debt service on the related series of Prior Bonds, or, if applicable, on any scheduled payments due from the Trust pursuant to an interest rate hedge agreement in accordance with the applicable bond resolution.

Except for the reserve funds established for each of the 2004 Refunding Bonds and the 2014 Refunding Bonds, on each date that the Trust pays down the principal amount of a series of such Prior Bonds or borrowers pay down the principal amount of the related loans, the amount held in the related reserve fund is reduced proportionately, and the amounts released from each such reserve fund are transferred either to the Pool Program Reserve Fund and then to the Deficiency Fund as described below, or directly to the Deficiency Fund. See the discussions below under the headings "2004 Debt Service Reserve Fund" and "2014 Debt Service Reserve Fund" for descriptions of the reserve funds for the 2004 Refunding Bonds and the 2014 Refunding Bonds, respectively.

2004 Debt Service Reserve Fund. Unlike other Prior Bonds, the reserve fund (the "2004 Debt Service Reserve Fund") for the Trust's State Revolving Fund Refunding Bonds, Series 2004 (the "2004 Refunding Bonds") was funded from proceeds of the 2004 Refunding Bonds and will be maintained in an amount equal to 10% of the principal amount of the 2004 Refunding Bonds outstanding from time to time. The 2004 Refunding Bonds consisted of the 2004A Refunding Bonds and the 2004B Refunding Bonds. The 2004B Refunding Bonds were refunded by the 2014 Refunding Bonds and the allocable portion of the 2004 Debt Service Reserve Fund was transferred to the 2014 Debt Service Reserve Fund. The remaining amounts in the 2004 Debt Service Reserve Fund, allocable to the 2004A Refunding Bonds, are available to pay debt service on the 2004A Refunding Bonds to the extent of any deficiency

in the debt service fund for the 2004 Refunding Bonds following application to such purpose of available amounts in the Pool Program Reserve Fund and the Deficiency Fund. Amounts released from the 2004 Debt Service Reserve Fund will be applied to the payment of debt service on the 2004A Refunding Bonds and will not be transferred to the Pool Program Reserve Fund.

2014 Debt Service Reserve Fund. Unlike the reserve funds for other Prior Bonds, the reserve fund (the "2014 Debt Service Reserve Fund") for the Trust's State Revolving Fund Refunding Bonds, Series 2014 (the "2014 Refunding Bonds") was funded and invested through the transfer of amounts held in the reserve funds for certain of the Prior Bonds refunded by the 2014 Refunding Bonds (the "2014 Refunded Prior Bonds"), including the 2004B Refunding Bonds, together with the related investment agreements. Amounts allocable to the 2004B Refunding Bonds were deposited into the Bond Proceeds Account within the 2014 Debt Service Reserve Fund and the remaining amounts were deposited into the Equity Account within the 2014 Debt Service Reserve Fund. Such amounts are invested in existing investment agreements, and, therefore, the releases from the 2014 Debt Service Reserve Fund will continue to be based on the releases that would have been made as scheduled payments of principal were paid on the applicable 2014 Refunded Prior Bonds. Amounts released from the Bond Proceeds Account will be used to pay debt service on the 2014 Refunding Bonds and amounts released from the Equity Account will be transferred to the Pool Program Reserve and/or the Deficiency Fund to provide additional security for the Prior Bonds. In addition, the Prior Bond Resolution for the 2014 Refunding Bonds allows the Trust to change the release dates and/or amounts or to release all of the 2014 Debt Service Reserve Fund from the lien of such Prior Bond Resolution at any time upon meeting certain conditions, including receipt of confirmation from each rating agency then rating the outstanding 2014 Refunding Bonds that such reduction will not by itself cause such rating agency to lower, suspend, remove or otherwise modify adversely the credit ratings then assigned by it to any outstanding 2014 Refunding Bonds.

## **Security under the Program Resolution**

• *Pool Program Reserve Fund*. The Pool Program Reserve Fund is held by the Program Trustee under the Program Resolution. As amounts are released from each reserve fund securing certain Prior Pool Bonds, such amounts, together with certain amounts released from the reserve funds securing the MWRA SRF Bonds which have been refunded in part by Prior Pool Bonds, are transferred to the Pool Program Reserve Fund. As borrowers make principal repayments on the Prior Pledged Direct Loans, such amounts will be transferred to the Pool Program Reserve Fund (to the extent not needed to cure or prevent a default in the payment of debt service on the related series of Prior Pool Bonds). The Pool Program Reserve Fund is pledged to secure all Prior Pool Bonds on a parity basis, as well as scheduled payments payable by the Trust pursuant to any interest rate hedge agreement with respect to such Prior Pool Bonds, in accordance with the Program Resolution.

Amounts in the Pool Program Reserve Fund are available to pay debt service on any series of Prior Pool Bonds, or if applicable, scheduled payments payable by the Trust pursuant to any related interest rate hedge agreement, to the extent that there are insufficient funds available in the related reserve fund to make such payment, or to the extent that the repayments on such date under the related Prior Pledged Direct Loans are insufficient to make such payment, as applicable. In addition, amounts necessary to satisfy a deficiency in any reserve fund for a series of Prior Pool Bonds are held in the Pool Program Reserve Fund to the extent amounts in the Pool Program Reserve Fund are sufficient to satisfy such deficiency. Amounts not required to be used or held in the Pool Program Reserve Fund are promptly transferred to the Deficiency Fund.

• **Deficiency Fund.** The Deficiency Fund is held by the Program Trustee under the Program Resolution. As amounts are released from the reserve fund securing the MWRA SRF Bonds (other than those amounts from such reserve funds first transferred to the Pool Program Reserve Fund), such amounts, together with certain Direct Loan repayments not otherwise pledged to secure any series of Prior Bonds, are transferred to the Deficiency Fund, together with funds released from the Pool Program Reserve Fund. The Deficiency Fund secures all Prior Bonds issued by the Trust on a parity basis as well as scheduled payments payable by the Trust pursuant to any interest rate hedge agreement, in accordance with the Program Resolution.

Amounts in the Deficiency Fund are available to pay debt service on any series of Prior Bonds, or if applicable, scheduled payments payable by the Trust pursuant to any interest rate hedge agreement, to the extent that there are insufficient funds available in the related reserve fund, or with respect to Prior Pool Bonds, in the Pool Program Reserve Fund to make such payment or in the event of any other insufficiency. In addition, amounts necessary to satisfy a deficiency in any reserve fund for a series of Prior Bonds (and with respect to Prior Pool Bonds, to the extent that there are insufficient funds in the Pool Program Reserve Fund) are held in the Deficiency Fund to the extent amounts in the Deficiency Fund are sufficient to satisfy such deficiency.

The availability of amounts in the Pool Program Reserve Fund and the Deficiency Fund to satisfy deficiencies with respect to the Prior Bonds is dependent on the borrowers making their payments in a timely manner, including borrowers making repayments on Prior Pledged Direct Loans, on the timely receipt of earnings on the reserve funds and Contract Assistance Payments, and on the timing of scheduled releases from the reserve funds allocable to such borrowers or the Prior Bonds.

## Release to the Equity Funds

Amounts not required to be used or held in the Deficiency Fund will be promptly transferred to the Master Trustee under the Master Trust Agreement to be held in either the clean water Equity Fund or the drinking water Equity Fund. The Master Trust Agreement provides that the Master Trustee will make amounts in the applicable Equity Fund available to the Program Trustee as described under "The MTA Bonds – Flow of Funds under the Master Trust Agreement – Equity Funds" and "The MTA Bonds- Sources of Payment and Security – Transfers Out of the Master Trust Agreement" in the front part of this Official Statement.

#### **Derivative Transactions**

In connection with the issuance of the Series 2006 Bonds, the Trust entered into two interest rate swap agreements (the "2006 Swap Agreements") with Bear Stearns Capital Markets, Inc. (the "Series 2006 Counterparty") in notional amounts of \$30,650,000 and \$46,605,000, respectively, in order to create a "synthetic fixed rate" for the Series 2006 Bonds maturing on August 1, 2022 and August 1, 2023 that bear interest at a variable rate. Under the terms of the 2006 Swap Agreements, the Series 2006 Counterparty has agreed to make variable rate payments to the Trust which are equal to the Trust's variable rate debt service payments on such Series 2006 Bonds and the Trust has agreed to make fixed rate payments to the Series 2006 Counterparty which are secured on a parity with and payable from the funds pledged to all other Series 2006 Bonds. The obligations of the Series 2006 Counterparty are guaranteed by JPMorgan Chase & Co. Effective December 10, 2008, all of the rights and obligations of the Series 2006 Counterparty under the 2006 Swap Agreements were transferred to JPMorgan Chase Bank, N.A. ("JPMorgan").

The 2006 Swap Agreements are subject to mandatory and optional termination by the Trust or the counterparty under certain circumstances. If at the time of any termination the Trust would be liable to the counterparty for a termination payment, such amount is payable solely from amounts which are not pledged to the payment of any debt obligations of the Trust outstanding at the date of such termination, including any outstanding Bonds or other SRF Bonds.

For further information regarding the 2006 Swap Agreements, reference is made to the audited financial statements of the Trust for the fiscal year ended June 30, 2017 which have been filed with the Municipal Securities Rulemaking Board (the "MSRB").

# **Debt Service Reserve Fund Investment Agreement Providers**

Certain amounts held in the debt service reserve funds allocable to the outstanding Prior Bonds are invested in investment agreements with the providers and in the amounts as of the date of delivery of the Bonds as set forth in the table on the following page.

A portion of the debt service reserve funds allocable to the outstanding Prior Pool Bonds are invested in bonds, notes and other evidence of indebtedness of certain United States government agencies or instrumentalities in the aggregate principal amount of \$257.8 million, as of the date of delivery of the Bonds.

<u>Provider</u>	<u>Series</u>	Fund Amounts
Citigroup	Series 12 Bonds	\$67.8 million
Natixis Funding Corp. <sup>1</sup>	Series 6 Bonds	\$10.3 million
	Series 7 Bonds	\$7.9 million
	Series 8 Bonds	\$36.8 million
	MWRA 2002A Bonds	\$24.5 million
FSA Capital Management Services,	Series 2014 Bonds	\$55.7 million
LLC <sup>2</sup>	Series 2004A Bonds	\$12.7 million
	Series 11 Bonds	\$37.4 million
Trinity Funding Company, LLC	Series 9 Bonds	\$49.4 million
Trinity Plus Funding Company, LLC	MWRA 1999A Bonds	\$65.0 million

**Debt Service Reserve** 

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<sup>1.</sup> The obligations of Natixis Funding Corp. are guaranteed by CDC IXIX.

<sup>2.</sup> The obligations of FSA Capital Management Services, LLC, are guaranteed by Financial Security Assurance Inc.



