

**PRELIMINARY OFFICIAL STATEMENT DATED FEBRUARY 13, 2023**

**NEW ISSUE—BOOK ENTRY ONLY**

**RATINGS: Moody's: \_\_  
S&P: \_\_  
(See "RATINGS" herein.)**

*In the opinion of Norton Rose Fulbright US LLP, New York, New York, Bond Counsel, assuming continuous compliance with certain covenants described herein, interest on the Series 2023 Bonds is not includable in gross income for federal income tax purposes under existing law. Bond Counsel is further of the opinion that interest on the Series 2023 Bonds is not an item of tax preference for purposes of the alternative minimum tax on individuals. In the further opinion of Bond Counsel, under existing law interest on the Series 2023 Bonds is exempt from personal income taxes imposed by the State of New York or any political subdivision thereof (including The City of New York). See "TAX MATTERS" herein for a description of the opinion of Bond Counsel and certain other tax consequences.*



**\$8,915,000\***  
**UPPER MOHAWK VALLEY**  
**REGIONAL WATER FINANCE AUTHORITY**  
**Water System Revenue Bonds, Series 2023 (Green Bonds)**

**Dated: Date of Delivery**

**Due: April 1, as shown on the inside cover**

The Water System Revenue Bonds, Series 2023 (Green Bonds) of the Upper Mohawk Valley Regional Water Finance Authority (the "Finance Authority") are hereinafter referred to as the "Series 2023 Bonds". Interest on the Series 2023 Bonds will be payable on each April 1 and October 1 (each, an "Interest Payment Date"), commencing October 1, 2023. The Series 2023 Bonds will bear interest from the date of delivery and will be issued in authorized denominations of \$5,000 or any integral multiple thereof. Principal of and premium, if any, and interest on the Series 2023 Bonds will be payable by The Bank of New York Mellon, as Trustee and Paying Agent, to the registered owners thereof as more fully described herein.

The Series 2023 Bonds will be issued initially under the book-entry only system and will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"). Individual purchases of beneficial interests in the Series 2023 Bonds may only be made in such book-entry form (without certificates). So long as DTC or its nominee is the registered owner of the Series 2023 Bonds, payments to the principal of, redemption premium, if any, and interest on such Series 2023 Bonds will be made by wire transfer directly to DTC or its nominee. Disbursement of such payments to DTC participants is the responsibility of DTC and disbursement of such payments to the beneficial owners is the responsibility of DTC participants. See "DESCRIPTION OF THE SERIES 2023 BONDS – Book-Entry Only System" herein.

**The Series 2023 Bonds are subject to redemption prior to maturity as described herein.**

The Series 2023 Bonds are payable as to both principal and interest solely from the revenues of the regional water system (the "Regional System"), located in portions of Oneida and Herkimer Counties, New York, which is owned and operated by the Upper Mohawk Valley Regional Water Board, a public corporation which operates under the name "Mohawk Valley Water Authority" (and which is referred to herein as the "MVWA"). See "THE MVWA" herein. Such revenues have been assigned to the Finance Authority as described herein. The Series 2023 Bonds shall be on a parity with other outstanding Additional Parity Indebtedness heretofore or hereafter issued by the Finance Authority. See "SECURITY FOR THE SERIES 2023 BONDS" herein.

**The Series 2023 Bonds are special obligations of the Finance Authority and are not a debt of the State of New York, any municipality within the State of New York or the MVWA and neither the State of New York, any such municipality nor the MVWA shall be liable thereon. The Finance Authority has no taxing power.**

*The Series 2023 Bonds are offered when, as and if issued by the Finance Authority and received by the Underwriter and subject to the approval of legality by Norton Rose Fulbright US LLP, New York, New York, Bond Counsel. Certain legal matters will be passed upon for the Finance Authority by its counsel, Calli Calli & Cully, Utica, New York, and for the Underwriter by its counsel, Orrick, Herrington & Sutcliffe LLP, New York, New York. Capital Markets Advisors, LLC, Great Neck, New York has acted as financial advisor to the Finance Authority. It is expected that the Series 2023 Bonds will be available for delivery to DTC in New York, New York on or about March 8, 2023.*

**RAYMOND JAMES®**

Dated: \_\_\_\_\_, 2023

\* Preliminary, subject to change.

This Preliminary Official Statement and the information contained herein are subject to change, completion or amendment without notice. The Issuer will make available its final Official Statement with respect to the Series 2020 Bonds. Under no circumstances shall this Preliminary Official Statement constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Series 2023 Bonds in any jurisdiction in which such offer, solicitation, or sale would be unlawful prior to registration or qualification under the securities laws of such jurisdiction.

**\$8,915,000\***  
**UPPER MOHAWK VALLEY**  
**REGIONAL WATER FINANCE AUTHORITY**  
**Water System Revenue Bonds, Series 2023 (Green Bonds)**

**MATURITIES, AMOUNTS, INTEREST RATES, PRICES OR YIELDS AND CUSIPS**

<u>Maturity</u> <u>April 1,</u>	<u>Amount</u>	<u>Interest</u> <u>Rate</u>	<u>Price or</u> <u>Yield</u>	<u>CUSIP<sup>(1)</sup></u> <u>(Base</u> <u>CUSIP</u> <u>916091)</u>	<u>Maturity</u> <u>April 1,</u>	<u>Amount</u>	<u>Interest</u> <u>Rate</u>	<u>Price or</u> <u>Yield</u>	<u>CUSIP<sup>(1)</sup></u> <u>(Base</u> <u>CUSIP</u> <u>916091)</u>
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\$ \_\_\_\_\_ % Term Bond Maturing April 1, \_\_\_\_\_ Price or Yield \_\_\_\_\_ % CUSIP<sup>(1)</sup>

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\* Preliminary, subject to change.

(1) CUSIP numbers have been assigned by an organization not affiliated with the Finance Authority or the MVWA and are included solely for the convenience of the holders of the Series 2023 Bonds. Neither the Finance Authority nor the MVWA are responsible for the selection or uses of these CUSIP numbers, nor is any representation made as to their correctness on the Series 2023 Bonds or as indicated above.

**UPPER MOHAWK VALLEY REGIONAL WATER FINANCE AUTHORITY**

***Officers and Members of the Board of Directors***

Vincent J. Gilroy, Jr., Chairperson

Eric Linder, Vice-Chairperson

Mitchell G. Ford, Treasurer

Thomas J. Nelson

***Executive Director***

Patrick J. Becher

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New York, New York

***Bond Counsel***

Norton Rose Fulbright US LLP  
New York, New York

***Financial Advisor***

Capital Markets Advisors, LLC  
Great Neck, New York

No purchaser, dealer, broker, salesperson or other person has been authorized 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. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of the Series 2023 Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. Certain information contained herein has been obtained from sources which are believed to be reliable, but it is not guaranteed as to accuracy or completeness and it is not to be construed as a representation by the Underwriter. The information and expressions of opinion 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 Finance Authority, the MVWA, or any municipality within the area served by the Regional System (as hereinafter defined) or the other matters described herein since the date hereof.

This Official Statement includes forecasts, projections and estimates that are based on expectations and assumptions which existed at the time such forecasts, projections and estimates were prepared. The inclusion in this Official Statement of such forecasts, projections and estimates should not be regarded as a representation by the Finance Authority, the MVWA or the Underwriters that such forecasts, projections and estimates will occur. Such forecasts, projections and estimates are not intended as representations of fact or guarantees of results.

If and when included in this Official Statement, the words “expects,” “forecasts,” “projects,” “intends,” “anticipates,” “estimates” and analogous expressions are intended to identify forward-looking statements and any such statements inherently are subject to a variety of risks and uncertainties that could cause actual results to differ materially from those projected. Such risks and uncertainties include, among others, general economic and business conditions, the effects of the pandemic, changes in political, social and economic conditions, regulatory initiatives and compliance with governmental regulations, litigation and various other events, conditions and circumstances, many of which are beyond the control of the Finance Authority or the MVWA. These forward-looking statements speak only as of the date of this Official Statement. The MVWA and the Finance Authority any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained herein to reflect any change in the MVWA’s or the Finance Authority’s expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

*The Underwriter has provided the following sentence for inclusion in this Official Statement. The Underwriter has reviewed the information in this Official Statement in accordance with, and as part of its responsibility to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriter does not guarantee the accuracy or completeness of such information.*

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITER MAY OVER-ALLOT OR EFFECT TRANSACTIONS THAT MAY STABILIZE OR MAINTAIN THE MARKET PRICE OF THE SERIES 2023 BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANYTIME.

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## OFFICIAL STATEMENT

**\$8,915,000\***

### UPPER MOHAWK VALLEY REGIONAL WATER FINANCE AUTHORITY Water System Revenue Bonds, Series 2023 (Green Bonds)

#### INTRODUCTION

##### General

The Upper Mohawk Valley Regional Water Finance Authority (the “Finance Authority”) was established in 1994 pursuant to an act of the New York State (“State”) Legislature (as amended and more particularly described herein, the “Finance Authority Act”). The Upper Mohawk Valley Regional Water Board, which operates under the name “Mohawk Valley Water Authority” (and is referred to herein as the “MVWA”) was also established in 1994 pursuant an act of the State Legislature (as more particularly described herein the “MVWA Act”). The Finance Authority Act and the MVWA Act are referred to collectively herein as the “Act”.

The purpose of this Official Statement is to set forth information with respect to the Finance Authority, its Series 2023 Bonds and the use of the proceeds thereof, the MVWA, the regional water system (the “Regional System”) operated by the MVWA in portions of Oneida and Herkimer Counties, New York, the Revenues (as defined herein) thereof, the Finance Authority’s Water System General Revenue Bond Resolution dated as of December 1, 1996 (the “General Resolution”) under which the Series 2023 Bonds are issued, and other related matters for use in connection with the sale of the Series 2023 Bonds.

The Finance Authority and the MVWA have entered into a Financing Agreement, dated as of October 30, 1996, as amended (the “Financing Agreement”) in which the Finance Authority has agreed to finance the acquisition and improvement of the Regional System by the MVWA through the issuance of Bonds and other obligations of the Finance Authority.

The Series 2023 Bonds will be issued by the Finance Authority under and pursuant to the Act and pursuant to and in accordance with the General Resolution and a Fourteenth Supplemental Resolution dated as of March 1, 2023 (the “Series 2023 Resolution”; the General Resolution and supplements thereto from time to time, including the Series 2023 Resolution, are sometimes herein called the “Resolution”). The Bank of New York Mellon is the Trustee under the Resolution and is herein called the “Trustee.” The Series 2023 Bonds are being issued to (i) finance the 2023 Project (described below) and (ii) pay the costs of issuance of the Series 2023 Bonds.

The 2023 Project (the “2023 Project”) consists of various capital projects including treatment facility improvements, pump station improvements, reservoir improvements, storage tank improvements, metering and regulating station improvements, transmission and distribution main improvements, and other miscellaneous projects. For additional information, see “APPENDIX A – ENGINEERING REPORT OF CONSULTING ENGINEER” and “GREEN BONDS – Series 2023 Bonds.”

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\* Preliminary, subject to change.

## **Special Obligation**

The Series 2023 Bonds will be special obligations of the Finance Authority, payable on a parity with all other outstanding Parity Bonds heretofore and hereafter issued, solely from and secured by a pledge of (i) all right, title and interest of the Finance Authority in and to the Revenues (as defined herein); (ii) all monies or securities in any of the funds or accounts established under the Resolution (other than the Rebate Fund and any fund permitted to be created free and clear of the Lien of the Resolution); (iii) all right, title and interest of the Finance Authority in and to the Financing Agreement; and (iv) all rights and privileges of every kind and nature appurtenant to, all proceeds of, and all right, title and claim which the Finance Authority now or may hereafter acquire in, the aforesaid property, subject only to the provisions of the Resolution, the Act and the Financing Agreement relating to the use and application thereof. As used herein, “Revenues” means all rates, fees, charges and other income and receipts derived from the operation of the Regional System including, without limiting the generality of the foregoing, investment proceeds and proceeds of insurance, condemnation, and sale or other disposition of assets, together with all federal, State or municipal aid, if any. See “SECURITY FOR THE SERIES 2023 BONDS – Revenues - Flow of Funds”.

**The Series 2023 Bonds are not a debt of the State of New York or any municipality of the State or the MVWA, and neither the State of New York, any such municipality nor the MVWA shall be liable thereon. The Finance Authority has no taxing power.**

## **Rate Covenant**

The MVWA has covenanted in the Financing Agreement to establish and collect rates, fees and charges sufficient in each Fiscal Year so that Revenues collected by the MVWA in such Fiscal Year will at least be equal to the sum of: (i) an amount equal to one hundred fifteen percent (115%) of the estimated Aggregate Debt Service on all Outstanding Bonds and Projected Debt Service on any Bonds projected to be issued payable in such Fiscal Year; and (ii) one hundred percent (100%) of all Operating Expenses, Accrued Promissory Note Payments, Pilot Payments, Authority Expenses and any other Required Deposits (See “SECURITY FOR THE SERIES 2023 BONDS – Rate Covenant and Other Covenants”). The Financing Agreement further permits the MVWA to provide that there may be no charges for any use of Projects by any Municipality in pursuance of its governmental functions or for services rendered to such Municipality in connection with its use of Projects. The Act requires that the MVWA conduct a public hearing prior to the establishment, fixing or revision of rates.

For purposes of the above Rate Covenant, Revenues shall include money of the MVWA or the Finance Authority, except money transferred from the Construction Fund that is unexpended proceeds of indebtedness, amounts held in the Bond Redemption and Accumulated Surplus Fund which the Trustee has been irrevocably instructed to apply to the payment of Operating Expenses or Debt Service Requirements within the Fiscal Year for which credit is given.

## **DESCRIPTION OF THE SERIES 2023 BONDS**

*Set forth below is a narrative description of certain provisions relating to the Series 2023 Bonds. These provisions have been summarized, and this description does not purport to be complete. Reference should be made to the Resolution and Financing Agreement, copies of which are on file with the Finance Authority. See also “APPENDIX E-1 – GENERAL RESOLUTION,” “APPENDIX E-2 – FORM OF FOURTEENTH SUPPLEMENTAL RESOLUTION” and “APPENDIX E-3 – FINANCING AGREEMENT AND FORM OF AMENDMENT” herein for a more complete description of certain provisions of the Series 2023 Bonds. All capitalized terms used herein and not otherwise defined shall have the respective meanings ascribed thereto in the Resolution.*



The Series 2023 Bonds shall be dated, shall bear interest at the rates and shall mature as set forth on the inside cover page of this Official Statement. The Series 2023 Bonds shall be issued in fully registered form without interest coupons appurtenant thereto in the denomination of \$5,000 or any integral multiple thereof.

Principal of and premium, if any, on the Series 2023 Bonds shall be payable at The Bank of New York Mellon, as Trustee. The Bank of New York Mellon has also been designated as the Paying Agent for the Series 2023 Bonds. Interest on the Series 2023 Serial Bonds and Term Bonds is payable by wire transfer on the Interest Payment Date from the Trustee to the holder of such Series 2023 Bond in whose name such Series 2023 Bonds is registered upon the bond registration books as of the fifteenth day (whether or not a business day) of the calendar month next preceding each April 1 and October 1 (the "Record Date") at the holder's address as it appears on the bond registration books. The principal amount of the Series 2023 Bond and any redemption premium shall be paid to the Registered Owner thereof upon surrender of such Bond at the principal corporate office of the Trustee. However, the Series 2023 Bonds shall initially be issued in book-entry form only and during all such times principal of, premium, if any, and interest on the Series 2023 Bonds shall be payable by wire transfer by the Trustee to The Depository Trust Company, New York, New York ("DTC"). See "Book-Entry Only System" below.

### **Mandatory and Optional Redemption of the Series 2023 Bonds**

*Mandatory Redemption of the Series 2023 Bonds.* The Series 2023 Bonds maturing on April 1, \_\_\_\_\_ are subject to mandatory redemption in part, on each of the dates and in the respective principal amounts set forth below, at a redemption price of 100% of the principal amount thereof together with the interest accrued thereon to the date fixed for redemption from mandatory Sinking Fund Installments. The following mandatory Sinking Fund Installment amounts and dates for such Term Bonds have been established under the Series 2023 Resolution:

<b>Series 2023 Term Bond</b>	
<b>Maturing on April 1, _____</b>	
<b><u>April 1</u></b>	<b><u>Principal Amount</u></b>

\_\_\_\_\_  
\* Maturity.

Any Sinking Fund Installment may, at the option of the Finance Authority, be reduced by all or any portion of the principal amount of Series 2023 Bonds of the maturity subject to redemption therefrom that have been acquired or redeemed otherwise than by application of Sinking Fund Installments and have not previously been applied to such a reduction.

*Optional Redemption of Series 2023 Bonds.* The Series 2023 Bonds maturing on or after April 1, \_\_\_\_\_ are subject to redemption prior to maturity at the option of the Finance Authority as a whole or in part on any day on or after April 1, \_\_\_\_\_ at 100% of the principal amount thereof plus accrued interest.

## **Notice of Redemption**

Whenever the Finance Authority shall, by Resolution of the Finance Authority, determine to redeem Outstanding Series 2023 Bonds in accordance with the right reserved to do so, the Finance Authority shall give the Trustee not more than sixty (60) days' and at least thirty-five (35) days' notice of the date fixed for redemption. When Series 2023 Bonds are called for redemption, whether at the option of the Finance Authority or pursuant to mandatory redemption, the Trustee shall cause a notice to be deposited in the United States mail first class, postage prepaid, not more than sixty (60) days and at least thirty (30) days prior to the redemption date addressed to the Registered Owners of the Series 2023 Bonds called for redemption, at the addresses appearing in the records kept by the Trustee. Such Notice shall be given in the name of the Finance Authority, shall identify the Series 2023 Bonds to be redeemed by certificate number, CUSIP number, date of issue, interest rate, Series, maturity date and any other identifying information (and in the case of a partial redemption of any Series 2023 Bonds, the respective principal amounts thereof to be redeemed and the numbers, including CUSIP numbers if applicable, of the Series 2023 Bonds to be redeemed which may, if appropriate, be expressed in designated blocks of numbers) shall specify the redemption date, the redemption price, and the Trustee's name and address and shall state that on the redemption date the Series 2023 Bonds called for redemption will be payable at the principal corporate trust office of the Trustee and that from the date of redemption interest will cease to accrue provided, however, that the Registered Owners of all Bonds to be redeemed may file written waivers of notice with the Trustee, and if so waived, such Bonds may be redeemed and all rights and liabilities of the Owners shall mature and accrue on the date set for such redemption, without the requirement of written notice.

## **Selection for Redemption**

So long as the Book-Entry System for the Series 2023 Bonds is in effect, if less than all of the Series 2023 Bonds of any one maturity are to be redeemed, the particular Series 2023 Bonds or portions of Series 2023 Bonds of such maturity to be redeemed will be selected by DTC and its Participants in such manner as DTC and its Participants may determine. If the Book-Entry System for the Series 2023 Bonds is no longer in effect, selection for redemption of less than all Outstanding Series 2023 Bonds will be made by the Finance Authority or, if not determined by the Finance Authority or if less than all Series 2023 Bonds of like maturity are called, by the Trustee by lot as provided in the Resolution.

## **Purchase of Series 2023 Bonds**

The Finance Authority may direct the Trustee to purchase or redeem the Series 2023 Bonds out of any moneys of the Finance Authority in the Bond Redemption and Accumulated Surplus Fund at a price not greater than one hundred percent (100%) of the principal amount thereof (or, to the extent permitted by law, the then current optional redemption price for such series of Bonds) plus accrued interest.

## **Book-Entry Only System**

The Depository Trust Company ("DTC"), New York, NY, will act as securities depository for the Series 2023 Bonds. The Series 2023 Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Bond certificate will be issued for each maturity of the Series 2023 Bonds in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing

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

Purchases of the Series 2023 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2023 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 Series 2023 Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Series 2023 Bonds, except in the event that use of the book-entry system for the Series 2023 Bonds is discontinued.

To facilitate subsequent transfers, all Series 2023 Bonds deposited by Direct Participants with DTC are registered in the name of DTC’s partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of the Series 2023 Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not affect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2023 Bonds; DTC’s records reflect only the identity of the Direct Participants to whose accounts such Series 2023 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. Beneficial Owners of Series 2023 Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series 2023 Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Bond documents. For example, Beneficial Owners of the Series 2023 Bonds may wish to ascertain that the nominee holding the Series 2023 Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Series 2023 Bonds within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Redemption proceeds, principal and interest payments on the Series 2023 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 Authority or Trustee, on 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 nor its nominee, Trustee, or Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and principal and interest payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Finance Authority, 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 Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the Series 2023 Bonds at any time by giving reasonable notice to the Finance Authority. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates are required to be printed and delivered.

The Finance Authority may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, Bond certificates will be printed and delivered, as applicable.

*Source:* The Depository Trust Company. The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that Authority believes to be reliable, but Authority takes no responsibility for the accuracy thereof.

THE FINANCE AUTHORITY CANNOT AND DOES NOT GIVE ANY ASSURANCES THAT DTC, DIRECT PARTICIPANTS OR INDIRECT PARTICIPANTS OF DTC WILL DISTRIBUTE TO THE BENEFICIAL OWNERS OF THE SERIES 2023 BONDS (1) PAYMENTS OF PRINCIPAL OF OR INTEREST OR REDEMPTION PREMIUM ON THE SERIES 2023 BONDS (2) CONFIRMATIONS OF THEIR OWNERSHIP INTERESTS IN THE SERIES 2023 BONDS OR (3) OTHER NOTICES SENT TO DTC OR CEDE & CO., ITS PARTNERSHIP NOMINEE, AS THE REGISTERED OWNER OF THE SERIES 2023 BONDS, OR THAT THEY WILL DO SO ON A TIMELY BASIS, OR THAT DTC, DIRECT PARTICIPANTS OR INDIRECT PARTICIPANTS WILL SERVE AND ACT IN THE MANNER DESCRIBED IN THIS OFFICIAL STATEMENT.

THE FINANCE AUTHORITY AND UNDERWRITER WILL NOT HAVE ANY RESPONSIBILITY OR OBLIGATIONS TO DTC, THE DIRECT PARTICIPANTS, THE INDIRECT PARTICIPANTS OF DTC OR THE BENEFICIAL OWNERS WITH RESPECT TO (1) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DIRECT PARTICIPANTS OR INDIRECT PARTICIPANTS OF DTC; (2) THE PAYMENT BY DTC OR ANY DIRECT PARTICIPANTS OR INDIRECT PARTICIPANTS OF DTC OF ANY AMOUNT DUE TO ANY BENEFICIAL OWNER IN RESPECT OF THE PRINCIPAL AMOUNT OF OR INTEREST OR REDEMPTION PREMIUM ON THE SERIES 2023 BONDS; (3) THE DELIVERY BY DTC OR ANY DIRECT PARTICIPANTS OR INDIRECT PARTICIPANTS OF DTC OF ANY NOTICE TO ANY BENEFICIAL OWNER THAT IS REQUIRED OR PERMITTED TO BE GIVEN TO OWNERS OR (4)

ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC AS THE REGISTERED HOLDER OF THE SERIES 2023 BONDS.

THE INFORMATION CONTAINED HEREIN CONCERNING DTC AND ITS BOOK-ENTRY SYSTEM HAS BEEN OBTAINED FROM DTC AND THE FINANCE AUTHORITY AND UNDERWRITER MAKE NO REPRESENTATION AS TO THE COMPLETENESS OR THE ACCURACY OF SUCH INFORMATION OR AS TO THE ABSENCE OF MATERIAL ADVERSE CHANGES IN SUCH INFORMATION SUBSEQUENT TO THE DATE HEREOF.

### **Certificated Series 2023 Bonds**

DTC may discontinue providing its services with respect to the Series 2023 Bonds at any time by giving notice to the Finance Authority discharging its responsibilities with respect thereto under applicable law, or the Finance Authority may terminate its participation in the system of book-entry-only transfers through DTC at any time. In the event that such book-entry-only system is discontinued, certain provisions (as follows) will apply. The Series 2023 Bonds will be issued in fully registered form in denominations of \$5,000 each or any integral multiple thereof. Principal of and interest on the Series 2023 Bonds when due will be payable upon presentation at the office of a bank or trust company located and authorized to do business in the State to be named as fiscal agent by the Finance Authority upon termination of the book-entry-only system. Interest on the Series 2023 Bonds will remain payable on October 1, 2023 and semi-annually thereafter on each April 1 and October 1, until maturity or redemption. Such interest will be payable by check drawn on the fiscal agent and mailed to the registered owner on each interest payment date at the address as shown on the registration books of the fiscal agent. The Record Date of the Series 2023 Bonds will remain the fifteenth day of the calendar month preceding each such interest payment date. Series 2023 Bonds may be transferred or exchanged at no cost to the registered owner at any time prior to maturity at the office of the fiscal agent for Series 2023 Bonds of the same or any other authorized denomination or denominations in the same aggregate principal amount upon the terms set forth in the Bond Certificate of the Finance Authority authorizing the sale of the Series 2023 Bonds. The fiscal agent shall not be obligated to make any such transfer or exchange of Series 2023 Bonds between the fifteenth day of the calendar month preceding an interest payment date and such interest payment date.

### **SOURCES AND USES OF FUNDS**

The proceeds to be received from the sale of the Series 2023 Bonds are estimated to be applied as follows:

Sources of Funds:

Principal Amount

[Net] Original Issue [Premium/Discount]

Total Sources

\_\_\_\_\_

Use of Funds:

Deposit to 2023 Project Account of Construction Fund

Costs of Issuance <sup>(1)</sup>

Total Uses

\_\_\_\_\_

<sup>(1)</sup> Includes underwriter's discount.

## SECURITY FOR THE SERIES 2023 BONDS

### Revenues

The Act requires the MVWA to establish, fix and revise fees, rates or other charges for the use of, or services furnished, rendered or made available by water facilities, including the Regional System, owned, leased or utilized by the MVWA in an amount at least sufficient at all times to provide funds in an amount sufficient, together with other revenues available to the MVWA, if any, (i) to pay to the Finance Authority, in accordance with the Financing Agreement, an amount sufficient to pay principal of and interest on the outstanding Bonds of the Finance Authority as the same shall become due and payable and maintaining or funding a debt service reserve fund therefor; (ii) to pay to any Municipality in accordance with the Act any payments in lieu of taxes as the same shall become due and payable; (iii) to raise an amount sufficient for the purpose of paying the costs of administering, maintaining, repairing and operating its water facilities, including the Regional System; (iv) to meet the requirements of any agreement, including requirements relating to the establishment of reserves for renewal and replacement and for uncollected charges and covenants respecting rates; (v) to pay all other reasonable and necessary expenses of the Finance Authority and the MVWA; and (vi) to pay or provide for such other purposes and water facilities as the MVWA considers appropriate and in the public interest. Such fees, rates or charges, if not paid when due, shall constitute a lien upon the premises receiving the service and such lien, which shall take precedence over all other liens or encumbrances except taxes, may be foreclosed in the same manner as tax liens.

Under the Act, a statutory lien is created upon the Revenues in favor of the payment of all amounts due pursuant to the Financing Agreement and in the order and priority set forth in the Financing Agreement. The Act provides that such lien shall be a first lien upon the Revenues. In the event that the MVWA fails to make any required payment to the Finance Authority, the Finance Authority or the Trustee may petition for the appointment, by the court having jurisdiction, of a receiver to administer the affairs of the MVWA, and, with court approval, to establish rates and charges to provide Revenues sufficient to make required payments. The statutory lien, however, does not give any holder or owner of any Bond issued by the Finance Authority power to compel sale of any part of the Regional System.

### Flow of Funds

Pursuant to the Financing Agreement, the MVWA is required to pay, as promptly as practicable after receipt thereof, all Revenues received by the MVWA into the General Account within the Regional Water Fund. On a monthly basis, the MVWA makes payments from the General Account in the following order of priority:

- (1) to the Operation Account within the Regional Water Fund, the amount specified in the Annual Budget for Operating Expenses for the corresponding month, together with any amounts necessary to meet unanticipated or emergency expenditures;
- (2) to the Trustee for deposit in the Revenue Fund and transfer to the Debt Service and Sinking Fund, such amount as is necessary so that the balance in the Debt Service and Sinking Fund equals Accrued Debt Service;
- (3) to the Trustee for deposit in the Revenue Fund and transfer to the Promissory Note Fund, such amount as is necessary so that the balance in the Promissory Note Fund equals the Accrued Promissory Note Payment;

(4) to the Trustee for deposit in the Revenue Fund and transfer to the Pilot Payments Fund, the amount specified in the Annual Budget for Pilot Payments for the corresponding month, together with any amount necessary to make up any shortfalls from the preceding months;

(5) to the Trustee for deposit in the Revenue Fund, the amount specified in the Annual Budget for Authority Expenses for the corresponding month, together with any amount necessary to make up any shortfalls from the preceding months;

(6) to the Trustee for deposit in the Revenue Fund and transfer to the Debt Service Reserve Fund, such amount as is necessary so that the balance in the Debt Service Reserve Fund equals the Debt Service Reserve Fund Requirement;

(7) to the Trustee for deposit in the Revenue Fund and transfer to the Repair and Improvement Fund, the amount specified in the Annual Budget for deposit in the Repair and Improvement Fund for the corresponding month, together with any amount necessary to make up any shortfalls from the preceding months;

(8) as shall be provided in the Resolution or any other resolution, trust indenture or similar document pertaining to Subordinated Indebtedness, such amount as is necessary to make all required payments with respect to such Subordinated Indebtedness;

(9) to the Trustee for deposit in the Revenue Fund and transfer to any fund or account hereafter created pursuant to the Resolution, as the Finance Authority shall direct; and

(10) to the Trustee for deposit in the Revenue Fund and transfer to the Bond Redemption and Accumulated Surplus Fund, the balance, if any, in the General Account in the Regional Water Fund at the end of each Fiscal Year.

Notwithstanding the above, upon the occurrence and continuance of an Event of Default under the Financing Agreement or of certain Events of Default under the Resolution, the Trustee may demand all moneys and securities then held by the MVWA in the Regional Water Fund and in all accounts created thereunder. Upon any such demand by the Trustee, all Revenues thereafter received shall promptly be paid to the Trustee for deposit in the Revenue Fund.

For a more extensive discussion of the terms and provisions of the Resolution and the Financing Agreement, including the security for the Series 2023 Bonds, the Funds and Accounts established by the Resolution and the Financing Agreement, and the purposes to which moneys in such Funds and Accounts may be applied, see “APPENDIX E-1 – GENERAL RESOLUTION,” “APPENDIX E-2 – FORM OF FOURTEENTH SUPPLEMENTAL RESOLUTION” and “APPENDIX E-3 – FINANCING AGREEMENT AND FORM OF AMENDMENT.”

### **Construction Fund**

The Resolution establishes a Construction Fund in which certain proceeds of the Series 2023 Bond issue will be held for payments required to be made by the MVWA to complete the 2023 Project or used to pay debt service on the Series 2023 Bonds.

### **Debt Service Reserve Fund**

The Resolution establishes a Debt Service Reserve Fund which shall include separate accounts for each series of Bonds issued under the Resolution. The amount required to be maintained in each account

shall equal the portion of the Debt Service Reserve Requirement on the Outstanding Bonds related to the individual series of Bonds. The Debt Service Reserve Requirement on any date of calculation shall mean the lesser of (a) the maximum annual Debt Service Requirements with respect to the Outstanding Bonds in the then current and all future Fiscal Years (for the purposes of which calculation any Variable Rate Indebtedness shall be calculated pursuant to the Supplemental Resolution pursuant to which the Indebtedness has been issued); (b) 125% of the average annual Debt Service Requirements with respect to Outstanding Bonds in the then current and all future Fiscal Years (for the purposes of which calculation any Variable Rate Indebtedness shall be calculated pursuant to the Supplemental Resolution pursuant to which the Indebtedness has been issued); and (c) the maximum amount that may be held in the Debt Service Reserve Fund, in the opinion of Bond Counsel to the Finance Authority, with respect to a series of Bonds intended to be tax-exempt without adversely affecting the tax-exempt status of such Bonds. The Debt Service Reserve Requirement may be satisfied in whole or in part by a Reserve Fund Credit Facility.

The Resolution provides that the Trustee shall be authorized, without further direction from the Finance Authority, to apply money in the Debt Service Reserve Fund toward the payment of the Debt Service Requirements from time to time becoming due and payable upon a series of Bonds to the extent that the Debt Service and Sinking Fund shall at any time insufficient with respect to such series of Bonds. The Trustee is required, for any particular series of Bonds, to initially draw funds from the account within the Debt Service Reserve Fund established for that series and to the extent that a deficiency in the Debt Service and Sinking Fund continues to exist, the Trustee is then required to draw funds from all other accounts in the Debt Service Reserve Fund pro-rata on the basis of the amount held in each of the other accounts at the time of such draw.

### **Repair and Improvement Fund**

The money on deposit in the Repair and Improvement Fund may be used: (a) to pay all or any part of the cost of constructing, acquiring, completing or restoring any portion of the Regional System; (b) to pay the cost of renewals to or replacements of any portion of the Regional System or to pay the cost of extraordinary maintenance and repairs thereto; (c) to repay the temporary loans, or any part thereof, incurred for the purpose of acquiring or constructing any portion of the Regional System, renewals and replacements or undertaking extraordinary maintenance and repairs; and (d) to pay other debts and liabilities of the MVWA incurred in connection with the operation of the Regional System not otherwise provided for, any Pilot Payments and to the payment of Debt Service Requirements.

The Repair Reserve Requirement is defined by the Resolution to be Five Hundred Thousand Dollars (\$500,000). The Finance Authority maintains sufficient funds in the Repair and Improvement Fund to satisfy the Repair Reserve Requirement. As of December 31, 2022, the Repair and Improvement Fund was funded in the amount of \$4,449,730 (unaudited).

### **Rate Covenant and Other Covenants**

The MVWA has covenanted in the Financing Agreement to establish, fix and revise, from time to time, fees, rates, rents or other charges for the use of, or the services furnished, rendered or made available by, the Regional System to provide, together with other available funds, for (i) the timely payment of Accrued Debt Service on all Bonds, including the Series 2023 Bonds, and the principal of and interest on any other Indebtedness of the Finance Authority payable from Revenues, (ii) the proper operation and maintenance of the Regional System, (iii) all other payments required for the Regional System not otherwise provided for, and (iv) all other payments that are required pursuant to the Financing Agreement, the Resolution, the Sale Agreement and any Purchase Agreement.



Without limiting the generality of the foregoing, the MVWA has covenanted to establish and collect rates, fees and charges sufficient in each Fiscal Year so that Revenues collected in such Fiscal Year will be at least equal to the sum of: (a) one hundred fifteen percent (115%) of the estimated Aggregate Debt Service on all Outstanding Bonds and Projected Debt Service on projected Bonds payable in such Fiscal Year; and (b) one hundred percent (100%) of the Operating Expenses, Accrued Promissory Note Payments, Pilot Payments, Authority Expenses and any other Required Deposits for such Fiscal Year. Such covenant is referred to herein as the "Rate Covenant."

For purposes of the Rate Covenant, Revenues include money of the MVWA or the Finance Authority, except money transferred from the Construction Fund that is unexpended proceeds of Indebtedness, held in the Bond Redemption and Accumulated Surplus Fund which the Trustee has been irrevocably instructed to apply to the payment of Operating Expenses or Debt Service Requirements within the Fiscal Year for which credit is given.

The MVWA has also covenanted in the Financing Agreement to review the adequacy of fees, rates and charges at least annually. If such annual or more frequent review, or the annual report of the Rate Consultant required pursuant to the Financing Agreement, indicates that the rates, fees and charges are or will be insufficient to meet the requirements of the Rate Covenant, the MVWA will promptly take the necessary action to cure or avoid any such deficiency.

The MVWA has covenanted in the Financing Agreement that, except as provided by law, it will not furnish or supply or cause to be furnished or supplied any product, use or service of the Regional System free of charge (or at nominal charge) to any person, firm or corporation, public or private, except that the MVWA need not charge any Municipality for any use of the Regional System in pursuance of its governmental function or for services rendered to such Municipality in connection with such use of the Regional System. In this regard, the Act expressly provides that the property commonly known as the Utica Zoo shall be exempt from all charges.

The MVWA further covenants that it will enforce the payment of any and all amounts owing to the MVWA for use of the Regional System. The Act provides that any rates, fees and charges which remain unpaid shall constitute a lien on the premises which received the service and that such lien may be enforced in the same manner as a lien for taxes.

### **Engineer and Rate Consultant**

The Finance Authority is required to retain annually an Engineer for a term of one year and the MVWA is required to retain annually a Rate Consultant for a term of one year whose duties, respectively, shall be to make any certificates and perform any other acts required or permitted of the Engineer and the Rate Consultant under the Financing Agreement and related documents. The same person or firm may not perform the duties and functions of the Engineer and the Rate Consultant.

In every Fiscal Year, the Engineer and the Rate Consultant are each required to make an examination of, and must report on, the properties and operations of the Regional System. Such reports must be submitted to the Finance Authority, the MVWA and the Trustee no later than ninety (90) days prior to the end of each Fiscal Year in the case of the report of the Rate Consultant and one hundred twenty (120) days prior to the end of each Fiscal Year in the case of the report of the Engineer and must set forth the following:

- (a) the Engineer's advice and recommendations as to the proper operation, maintenance and repair of the Regional System during the ensuing Fiscal Year, and an estimate of

the amounts of money necessary for such purposes and the amounts required for the Repair and Improvement Fund;

(b) the Engineer’s advice and recommendations as to improvements which should be made during the ensuing five Fiscal years, and an estimate of the amounts of money necessary for the such purposes;

(c) the Rate Consultant’s advice and recommendations as to any necessary or advisable revisions of rates, fees and charges with respect to the Engineer’s recommended five-year capital plan and the Rate Consultant’s advice and recommendations showing the amount to be expended during each of such Fiscal Years from the proceeds of Bonds issued under the provisions of the Resolution; and

(d) the Engineer’s findings whether the Regional System has been maintained in good repair and sound operating condition, and its estimate of the amount, if any, required to be expended to place the Regional System in such condition and the details of such expenditures and the approximate time required therefor. The MVWA is required to take prompt action to restore the Regional System consistent with the Engineer’s finding.

**Parity Obligations**

The Series 2023 Bonds will be on a parity with other Additional Parity Indebtedness heretofore (collectively, the “Outstanding Bonds”) and hereafter issued pursuant to the Resolution as shown in the following table:

<u>Parity Obligation</u>	<u>Outstanding Principal Amount (as of November 30, 2022)</u>
Series 2000 Bonds <sup>(1)</sup>	\$ 3,227,475
Series 2015 Bonds	18,350,000
Series 2016 Bonds	6,820,000
Series 2020A Bonds	14,920,000
Series 2020B Bonds	<u>10,680,000</u>
<b>Total</b>	<b><u>\$53,997,475</u></b>

<sup>(1)</sup> The 2000 Bonds include capital appreciation bonds payable as to principal and accreted interest in 2021 through 2030. Including the accreted interest on such bonds as of November 30, 2022, the total outstanding amount of the 2000 Bonds was \$15,820,000.

The Finance Authority anticipates that it will issue additional Bonds from time to time in the future to finance capital improvements to the Regional System. (See “CAPITAL IMPROVEMENT PROGRAM”.)

The Resolution provides that the Finance Authority may hereafter issue Additional Parity Indebtedness, including Bonds, on a parity with the Series 2023 Bonds for any lawful corporate purpose only upon satisfaction of certain requirements, including, among other things, receipt by the Trustee of the following:

(a) a certificate duly executed by the Accountant stating that, based upon an audit of the books and records of the MVWA and the Finance Authority, for any 12 consecutive month period of the 18 calendar months immediately preceding the month during which the Additional Parity Indebtedness is to be issued, (i) the MVWA has complied with the Rate Covenant, (ii) all deposits required to be maintained into the Debt Service and Sinking Fund were made, and (iii) the Debt Service Reserve Fund Requirement was maintained in accordance with the Resolution;

(b) a certificate duly executed by an Engineer setting forth in detail and based upon reasonable assumptions set forth therein (1) his or her estimate of the Operating Expenses for each of the five (5) Fiscal Years following the Issuance of such series of Bonds, plus the Fiscal Year in which such Bonds are issued; and (2) the Debt Service Requirements for each such Fiscal Year;

(c) a Certificate of the Rate Consultant setting forth his or her opinion that the amount of estimated Operating Revenues for each such Fiscal Year as described above will be sufficient, together with amounts capitalized and to be capitalized, from the proceeds of the Additional Parity Indebtedness or otherwise made available and not already taken into account to reduce the obligations which Operating Revenues must cover, to satisfy the Rate Covenant for each such Fiscal Year;

(d) if the Additional Parity Indebtedness is being issued to finance water facilities, a certificate duly executed by an Engineer that, among other things: (1) states that such water facilities will be useful or desirable in connection with the operation of the Regional System, will be technically feasible and in compliance with the MVWA's approved water system plan; (2) setting forth the estimated Costs of the acquisition and construction of such water facilities; and (3) his or her opinion that the net proceeds of the Additional Parity Indebtedness, together with other moneys which are then available or reasonably expected to be available therefore, will be sufficient to pay the costs of acquisition or construction of the water facilities and as to the date when such water facilities will be placed in commercial operation; and

(e) if the Additional Parity Indebtedness is being issued to finance the refunding of Additional Parity Indebtedness, the Finance Authority may provide a certificate executed by an Accountant (in lieu of the certificates referred to in paragraphs (b) and (c) above) stating that for the then current and each future Fiscal Year, the Debt Service Requirements will be no more than ten per centum (10%) more than the Debt Service Requirements that would have existed for that Fiscal Year with respect to the portion of the Additional Parity Indebtedness being refunded; and, if the Additional Parity Indebtedness is being issued to finance a refunding unless all refunded Indebtedness is to be redeemed or otherwise retired on the date of settlement for the refunding, such schedules, verified as to their mathematical accuracy by an Accountant, demonstrating the adequacy of funds deposited for the refunding and the income thereon for the purpose of paying when due, the principal or redemption price of and interest on the refunded Indebtedness.

The Resolution does, however, provide certain exceptions to the above requirements. First, certain certificates otherwise required to be executed by an Engineer or Accountant for purposes of paragraphs (a) through (d) above may be executed by an Authorized Representative of the Finance Authority or the MVWA, as the case may be, so long as the Additional Parity Indebtedness does not exceed either \$1,000,000 or constitutes completion Bonds except that, in the case of completion Bonds, the Engineer shall be required to certify that the proceeds of such Bonds are sufficient to complete the cost of construction of such water facilities. In addition, the Finance Authority need not comply with the above requirements, other than the requirement contained in (e) above, if (i) all Outstanding Bonds and Additional Parity Indebtedness is secured as to the payment of principal and interest due on such Bonds and Additional Parity Indebtedness by a Credit Facility under which no wrongful dishonor remains uncured and (ii) the Credit

Facility Provider consents to the issuance of the Additional Parity Indebtedness without the satisfaction of such requirements or (iii) the proceeds of such Additional Parity Indebtedness will be expended on water facilities required to be constructed to comply with any State or federal law, rule or regulation.

Notwithstanding the above, the Resolution provides that the Finance Authority may borrow from time to time an amount outside the Resolution which shall not exceed \$500,000 in principal amount in the aggregate at any one time for working capital purposes and may secure the repayment of such obligation by granting a lien on Revenues that is on a parity with the lien securing the Series 2023 Bonds if the Finance Authority certifies to the Trustee that the MVWA needs the proceeds for the proper operation of the Regional System and that the Finance Authority reasonably believes it will meet its obligations on such borrowing and the Series 2023 Bonds as and when the same come due.

### **The Sale Agreement and the Promissory Note**

Pursuant to a Sale Agreement, dated as of October 30, 1996 (the “Sale Agreement”), by and between the Finance Authority, the MVWA and the City of Utica (the “City”), the MVWA acquired title to the City’s and the Utica Board of Water Supply’s (“UBWS”) system for the collection, transmission, treatment and distribution of water (the “System”). The MVWA also acquired additional Projects from Municipalities (as those capitalized terms are defined in the Act) pursuant to several Purchase Agreements and Deeds (the “Purchase Agreements”). The System and the Projects acquired from the Municipalities comprised the Regional System, as it existed at that time.

With the acquisitions, the MVWA became and is now responsible for providing potable water to the residents of the areas previously served by the System and such Projects.

Pursuant to the Sale Agreement, the Finance Authority delivered to the City a Promissory Note in the principal amount of \$7,000,000 (the “Promissory Note”). The Promissory Note matures in 2037. All payments on the Promissory Note have been made on a timely basis and the Finance Authority is required to make annual payments in the amount of \$480,715 for the remaining term of the Promissory Note. As of November 30, 2022, the principal amount outstanding on the Promissory Note is \$4,704,259.

Future payments on the Promissory Note are subordinate to the Series 2023 Bonds, as well as to all outstanding Additional Parity Indebtedness.

### **Payments in Lieu of Taxes**

The Act provides that the Finance Authority shall be exempt from fees, taxes, special ad valorem levies or assessments. The Act, however, also requires the MVWA to make certain payments to certain municipalities and school districts (see “THE MVWA – Payments in Lieu of Taxes”). Pursuant to the Financing Agreement and Resolution, these payments in lieu of taxes shall be subordinate to debt service payments due on all outstanding Additional Parity Indebtedness and the Promissory Note.

### **State and Political Subdivisions Not Liable**

Neither the members of the Finance Authority nor any person executing the Series 2023 Bonds shall be liable personally on such Series 2023 Bonds by reason of the issuance thereof. The Series 2023 Bonds shall not be a debt of the State, any municipality of the State, any other governmental entity in or of the State or any such municipality (other than the Finance Authority), or the MVWA, and neither the State nor any municipality of the State or governmental entity of the State or any such municipality (other than the Finance Authority) nor the MVWA shall be liable thereon. The Finance Authority has no taxing power.

## FINANCE AUTHORITY DEBT SERVICE REQUIREMENTS

The following schedule sets forth the principal and interest requirements for the Outstanding Bonds of the Finance Authority, all of which are Additional Parity Indebtedness, as well as the Series 2023 Bonds for each Fiscal Year ending December 31 of each year set forth below. The table does not include the \$480,715 annual payment through Fiscal Year 2037, relating to the Promissory Note, which is subordinated indebtedness.

<u>Fiscal Year</u>	<u>Debt Service Requirements</u>	<u>Series 2023 Bonds</u>		<u>Total Debt Service</u>
		<u>Principal</u>	<u>Interest</u>	
2023	\$6,526,034			
2024	6,512,887			
2025	6,515,400			
2026	6,519,770			
2027	6,513,547			
2028	6,517,593			
2029	4,555,490			
2030	4,552,632			
2031	3,526,273			
2032	3,523,383			
2033	3,536,449			
2034	1,867,048			
2035	1,865,810			
2036	1,866,550			
2037	1,853,700			
2038	1,853,125			
2039	1,850,600			
2040	1,851,025			
2041	1,849,300			
2042	1,850,325			
2043	1,849,025			
2044	1,850,300			
2045	1,849,025			
2046	1,850,125			
<b>Total</b>	<b>\$82,905,416</b>			

## THE FINANCE AUTHORITY

### Purposes and Certain Powers

The Finance Authority is a public benefit corporation created pursuant to the Finance Authority Act. Among its powers under the Act, the Finance Authority may borrow money and issue negotiable or non-negotiable notes, bonds or other obligations, such as the Series 2023 Bonds and provide for the rights of holders thereof. Originally, the Act provided that the aggregate principal amount of bonds, notes or other obligations issued by the Finance Authority shall not exceed one hundred million dollars (\$100,000,000) in issuance amount, subject to certain exceptions for bonds issued to refund or otherwise repay bonds, notes or other outstanding obligations. In 2014, the Act was amended to increase such aggregate principal amount to one hundred fifty million (\$150,000,000) (the “System Bond Cap”). In addition, the amendment provided for a separate bond cap of one hundred fifty million dollars (\$150,000,000) for projects determined by MVWA to be reasonably necessary to service manufacturing facilities constructed in the area served by the Regional System after January 1, 2014 (the “Manufacturing Bond Cap”). The Finance Authority issued \$4,050,000 of the Series 2016 Bonds under the Manufacturing Bond Cap and \$7,000,000 of the Series 2020A Bonds under the Manufacturing Bond Cap and has determined that \$5,000,000\* of the Series 2023 Bonds will be issued under the Manufacturing Bond Cap.

Pursuant to the Act, the Finance Authority has entered into the Financing Agreement under which the MVWA is required to charge and collect sufficient rates to pay the costs of operating and financing the Regional System and to adequately operate and maintain the Regional System. (See “APPENDIX E-1 – GENERAL RESOLUTION,” “APPENDIX E-2 – FORM OF FOURTEENTH SUPPLEMENTAL RESOLUTION” and “APPENDIX E-3 – FINANCING AGREEMENT AND FORM OF AMENDMENT.”) Pursuant to the Act, there is a statutory lien upon the Revenues in favor of the payment of all amounts due to the Finance Authority under the Financing Agreement. The Revenues will remain subject to this lien until provision for payment of all Series 2023 Bonds has been made.

The Act provides that the Finance Authority is not required to pay taxes, special ad valorem levies or assessments, whether state or local, including but not limited to fees, taxes, special ad valorem levies or assessments on real property, franchise taxes, sales taxes or other excise taxes upon any property owned by it or under its jurisdiction, control or supervision, or upon the uses thereof, or upon its activities in the operation and maintenance of its facilities or any fares, tolls, rentals, rates, charges, fees, revenues or other incomes received by the Finance Authority; provided, however, the Finance Authority shall be required to pay water and pure water fees or charges as may be negotiated by any public corporation. The Finance Authority is further exempt from any filing, mortgage recording or transfer fees or taxes in relation to instruments filed, recorded or transferred by or on its behalf. The Act does, however, require that the MVWA make certain payments in lieu of taxes (See “THE MVWA – Payments in Lieu of Taxes”).

### Members

The Finance Authority is governed by a board consisting of five members who are appointed as follows: (1) one member, who shall be a resident of the City and shall be appointed by its City Council; (2) one member, who shall be a resident of the City and shall be appointed by its Mayor; (3) one member, who shall be appointed by the County Executive of the County of Oneida and who shall be alternately a resident of the City and a resident of the area served by the Regional System outside such City; (4) one member, who shall be a resident of the Service Area outside the City and who shall be appointed alternately by the town board of the Town of New Hartford and the town board of the Town of Whitestown; and (5) one member, who shall be a resident of the Service Area outside the City and shall be appointed by a majority

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\* Preliminary, subject to change.

vote of representatives in attendance at a meeting called for such purpose from the Towns of Deerfield, Frankfort, Kirkland, Marcy, Trenton and Schuyler. Appointments made by such Mayor, County Executive and City Council are not subject to confirmation, approval or veto by any other municipal officer or board.

The term of the members of the Finance Authority are three years.

The powers of the Finance Authority shall be vested in its members and shall be exercised at a meeting of its members duly called and held where a quorum of three members are present. No action is permitted to be taken by the Finance Authority except pursuant to the favorable vote of not less than three members of the Finance Authority.

The present members of the Finance Authority and the dates of expiration of their terms as members are as follows:

<u>Name</u>	<u>Term Expires</u>
<b>Vincent Gilroy, Jr. – Chairperson</b> Education: B.S., Manhattan College President, Vincent J. Gilroy, Jr. CPA Accounting Firm	December 31, 2024
<b>Eric Linder – Vice-Chairperson</b> Education: B.S., Siena College Vice President, M&T Bank	December 31, 2023
<b>Thomas Nelson</b> Education: B.A., M.A., Utica College Investment Advisor, Thomas J. Nelson & Associates	December 31, 2024
<b>Mitchell G. Ford – Treasurer</b> Education: B.S., SUNY Institute of Technology Retired from the U.S. Army	December 31, 2024
<b>Vacant</b>	

### **Officers and Employees**

The officers of the Finance Authority consist of a Chair, a Vice-Chair, a Treasurer and Secretary. These officers, with the exception of the Secretary, are required to be members of the Finance Authority. The Secretary, together with any Executive Director, Comptroller or counsel appointed by the Finance Authority, shall be appointed by the governing body, shall serve at the pleasure of that body and shall be in the exempt class of civil service. The governing body may also appoint and, at its pleasure, remove such additional officers and employees as it deems necessary for the performance of the powers and duties of the Finance Authority and fix and determine their qualifications, duties and compensation subject to the provisions of the Civil Service Law of the State.

The following are the Officers of the Finance Authority:

Vincent Gilroy, Jr., Chairperson  
Eric Linder, Vice-Chairperson  
Mitchell G. Ford, Treasurer  
Patrick Becher, Secretary

## THE MVWA

### Purposes and Certain Powers

The MVWA is a corporate municipal instrumentality of the State created by the MVWA Act. The MVWA was empowered by the Act to acquire from the City and other Municipalities title to the Regional System and to establish, fix, revise, collect and enforce the payment of all fees, rates, rents and other service charges for the use of or services furnished by the Regional System.

The MVWA is required under the Act and Financing Agreement to establish rates that will provide adequate funds to pay the debt service on outstanding Authority Indebtedness and to provide for the proper operation and maintenance of the Regional System and for all other payments required pursuant to the Financing Agreement, the Resolution, the Sale Agreement and any Purchase Agreement. For a detailed description of the application of such funds, see “SECURITY FOR THE SERIES 2023 BONDS – Flow of Funds”, “APPENDIX E-1 – GENERAL RESOLUTION,” “APPENDIX E-2 – FORM OF FOURTEENTH SUPPLEMENTAL RESOLUTION” and “APPENDIX E-3 – FINANCING AGREEMENT AND FORM OF AMENDMENT.”

The MVWA owns the Regional System. However, under the terms of the Financing Agreement, (a) the MVWA leases the Regional System to the Finance Authority and (b) the Finance Authority appoints the MVWA the exclusive operator of the Regional System.

No other governmental board, agency, corporation or officer of the State has jurisdiction of, or control over, or is required to approve any water rates or charges for services or facilities established by the MVWA. The Act expressly declares that neither the Public Service Commission, the New York State Department of Environmental Conservation (the “NYSDEC”) nor any municipal or state agency shall have any jurisdiction over the MVWA or the Finance Authority or any power over the regulation of the fees, rates or other charges established, fixed or revised by the MVWA, except as provided by law with respect to the supply of water to users outside the area served by the Regional System. The MVWA, however, is required to conduct a public hearing prior to establishing, fixing, or revising rates, fees or other charges.

### Payments in Lieu of Taxes

All property owned or under the jurisdiction, control or supervision of the Finance Authority is exempt from property taxes pursuant to the Act. The Act, however, requires the MVWA to pay to certain municipalities and school districts located in the area served by the Regional System or within which property of the MVWA is located payments in lieu of taxes (“PILOTs”) in the amounts hereinafter described unless the governing board of the MVWA, in accordance with the Act, adopts a resolution approved by at least seventy-five per centum of the governing board to decrease such payments. Such decreases are required to be applied uniformly to each municipality and school district. The MVWA is further empowered to determine whether such payments shall be prior or subordinate to any other payments it is required to make under the Act, including the payment of sums to the Finance Authority or to any trustee representing the holders of any bonds issued by the Finance Authority. The Financing Agreement makes such PILOTs subordinate to debt service payments on Bonds and the Promissory Notes and certain MVWA operating expenses. See APPENDIX E-3 – FINANCING AGREEMENT AND FORM OF AMENDMENT” hereto.



The PILOTs required to be made by the MVWA under the Act total \$1,325,645 for 2023 and are as follows:

(1) to all towns which provide services to the MVWA, the sum of \$95,386. Such payments will increase by 5% every 6<sup>th</sup> year (the next increase will occur in 2027), and terminate in 2037;

(2) to the Upper Mohawk Valley Memorial Auditorium Authority, the total sum of \$805,255. Such payments will increase by 10% every 6<sup>th</sup> year (the next increase will occur in two steps beginning in 2026), and terminate in 2037;

(3) to the City, the sum of \$425,004. Such payments will vary according to a schedule set forth in the enabling act, and terminate in 2037.

### **Members**

The MVWA is governed by a board consisting of twelve members appointed as follows: (1) two members, each of whom shall be a resident of the City and shall be appointed by the Utica City Council; (2) two members, each of whom shall be a resident of the City and shall be appointed by its Mayor; (3) two members, each of whom shall be appointed by the County Executive, with one required to reside in a village served by the Regional System and the other required (a) to reside in the area served by the Regional System outside the City and (b) to have his or her appointment confirmed by the Herkimer County Legislature; (4) two members, each of whom shall be a resident of the City and shall be appointed by the Oneida County Legislature; (5) one member who shall be appointed by the Town of New Hartford; (6) one member who shall be appointed by the Town of Whitestown; (6) one member who shall be appointed alternately by the town boards of the Town of Marcy, the Town of Schuyler and the Town of Kirkland; and (7) one member who shall be appointed alternately by the town boards of the town of Trenton, the Town of Deerfield and the Town of Frankfort. Each of the members described in clauses (5) through (7) must reside in the area served by the Regional System outside the City. Appointments made by the Mayor of Utica, the Oneida County Executive and the Utica City Council are not subject to confirmation, approval or veto by the Utica City Council, the Oneida County Legislature or the Mayor of Utica, respectively.

The terms of the members appointed to the MVWA are three years. No member of the MVWA shall be a member of the Finance Authority.

The powers of the MVWA shall be vested in and be exercised by the members at a meeting duly called and held where a quorum of seven members are present. No action is permitted to be taken by the MVWA except pursuant to the favorable vote of at least seven voting members of the MVWA.

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The present members of the MVWA and the dates of expiration of their terms as members are as follows:

<u>Name</u>	<u>Term Expires</u>
<p><b>Elis DeLia – Chairperson</b></p> <p>Education: College of the Holy Cross            J.D., Syracuse University Law School            President, S. DeLia Corporation            Retired from NYS Department of Taxation &amp; Finance</p>	December 31, 2025
<p><b>Bruce Brodsky – Vice-Chairperson</b></p> <p>Education: B.A., Utica College of Syracuse University            M.S., Syracuse University            Retired from Upstate Cerebral Palsy</p>	December 31, 2023
<p><b>Rocco Arcuri - Treasurer</b></p> <p>Education: B.S. Business Marketing, Le Moyne College            President and CEO, Adirondack Bank</p>	December 31, 2025
<p><b>Carl Annese</b></p> <p>Education: A.A.S., Construction Management, Herkimer CCC.            Manager of Sales and Marketing, Coastal Greenhouses            Chair, UMV Regional Auditorium Authority            Deputy Supervisor, Town of Marcy, NY</p>	December 31, 2024
<p><b>Dennis A. Bova</b></p> <p>Licensed New York State water operator            Retired, Superintendent of Maintenance, Mohawk Valley Water Authority</p>	December 31, 2023
<p><b>Vincent J. Coyne</b></p> <p>Education: B.A., Utica College            M.S., University of Southern California            President, Coyne Technical Services            Retired from Rome Air Development Center</p>	December 31, 2023
<p><b>Mark Ford</b></p> <p>Education: B.S. Business, Syracuse University            President and CEO, ShipRite Services, Inc.</p>	December 31, 2025
<p><b>George Haskell</b></p> <p>Retired from Utica National Insurance            Town Assessor for Deerfield, NY and Schuyler, NY</p>	December 31, 2025
<p><b>Richard Karam</b></p> <p>Education: B.A. in Education            High School Teacher</p>	December 31, 2024

<u>Name</u>	<u>Term Expires</u>
<b>Frank Mutolo</b> Education: Associates Degree, Utica College IT Project Manager, City of Utica	December 31, 2021*
<b>Bette Szesny</b> Education: Utica School of Commerce Owner, Express Desktop	December 31, 2021*
<b>Vacant</b>	

\* Serves until a successor is appointed.

### **Officers and Employees**

The Officers of the MVWA consist of a Chair, a Vice-Chair, a Treasurer, and a Secretary. These officers, with the exception of the Secretary, shall be members of the MVWA. The Secretary, together with any Executive Director, Comptroller or counsel appointed by the MVWA shall be appointed by the governing body, shall serve at the pleasure of that body and shall be in the exempt class of civil service. The governing body may appoint, and at its pleasure remove such additional officers and employees as it deems necessary for the performance of the powers and duties of the Finance Authority and fix and determine their qualifications, duties and compensation subject to the provisions of the Civil Service Law of the State.

The following are the Officers of the MVWA:

Elis J. Delia, Chairperson  
Bruce Brodsky, Vice-Chairperson  
Rocco Arcuri, Treasurer  
Amy Passacantando, Secretary

### **THE REGIONAL SYSTEM**

The major components of the Regional System, as it exists today, were formerly operated by or on behalf of the City. In 1937, the City acquired the Consolidated Water Company of Utica. The City continued to provide water service to customers within the City and various surrounding towns and villages until 1996, when the MVWA assumed ownership and operation of the City's (and the Utica Board of Water Supply's) water facilities, under the terms of a Sale Agreement dated as of October 30, 1996 (the "Sale Agreement") by and between the Finance Authority, the MVWA and the City. The MVWA has also acquired additional water facilities from various municipalities pursuant to purchase agreements and deeds (collectively, the "Purchase Agreements"). The water facilities acquired under the Sale Agreement, the Purchase Agreements and additional water facilities and improvements otherwise acquired or made by the MVWA comprise the Regional System as it exists today.

The Regional System currently serves the eastern portion of Oneida County, including the City, parts of the Towns of Trenton, Marcy, Deerfield, New Hartford, Whitestown, Kirkland and Westmoreland, and six villages (Oriskany, Whitesboro, Yorkville, New Hartford, New York Mills and Holland Patent). Some limited service is also provided to parts of the Towns of Frankfort and Schuyler in the southwest

corner of Herkimer County. The population of the area served by the Regional System is estimated to be approximately 126,250, as of December 2022.

As of December 31, 2021, the Regional System provides retail service to 39,576 metered accounts, of which 19,193 are located in the City. The Regional System also serves the State University of New York Institute of Technology at Utica/Rome, Hamilton College (located in the Town of Kirkland) and the State of New York Midstate Correctional Facility (located in the Town of Marcy).

For 2023, the MVWA expects to derive 63% of its revenues from consumption-based charges; 24% from fixed charges; and 13% from other fees and services.

The MVWA owns the rights to withdraw up to 32 million gallons per day (“MGD”) of water from the Hinckley Reservoir, pursuant to a water supply permit (“WSP”) issued by the NYSDEC, and owns the water filtration plant, most of the essential pump stations, finished water storage facilities and much of the approximately 700 miles of water mains for transmission, supply and distribution of water included within the Regional System.

## **General Description and History**

### *General Description of Regional System Facilities*

The source of water for the Regional System is Hinckley Reservoir, which has a storage capacity of approximately 25 billion gallons. Hinckley Reservoir is located approximately 18 miles north of Utica, was built in 1915, is owned by the State and is operated by the New York State Canal Corporation (the “Canal Corporation”), a subsidiary of the New York Power Authority (the “NYPA”). The MVWA is authorized to draw 32 MGD of water from Hinckley Reservoir pursuant to a NYSDEC Water Supply Permit issued to the MVWA dated June 1, 2014. The reservoir watershed encompasses 373 square miles of largely undeveloped lands, mostly within the Adirondack Park. Hinckley Reservoir also serves as one of the water sources for the Erie Canal System, which is also operated by the Canal Corporation. Water flows into the Regional System through the Hinckley Reservoir Dam intake structure.

The water is conveyed through two parallel raw water transmission mains to the water treatment plant for the Regional System (the “WTP”). The WTP is approximately 16 miles north of the City and three miles southwest of the Hinckley Reservoir. The treated water is conveyed by gravity from the WTP through two parallel transmission mains to the new Toby Road (two 6-MG tanks) and Marcy (3-MG tank) Water Storage Tanks. From there, it is conveyed to the 10-MG Trenton Road Tank and into the distribution system. The Southern and Deerfield open Reservoirs are now classified as active-standby (i.e., off-line) and will be used only in the event of an emergency.

The distribution system consists of a network of mains, pump stations, and local water storage tanks located throughout the service area. There are secondary water treatment facilities in the Regional System, 20 pump stations, a total of five reservoirs (two active-standby and three inactive) for storing water, 28 storage tanks, 33 master meter stations, and 92 pressure regulating and altitude valve stations. Approximately 704 miles of water mains for transmission and distribution of water are included within the Regional System. For a more complete description of the Regional System, see “APPENDIX A – ENGINEERING REPORT OF CONSULTING ENGINEER” herein.

### *History*

The administration of water supply and distribution in the Utica area has undergone numerous changes during the area’s history. The first formal organization to manage the water system was the Utica

Aqueduct Company, established in 1802 by the State Legislature. The company developed a series of springs in what is now downtown West Utica (Spring Street). In 1848, the Utica Water Works Company (“Water Works”) developed a well supply on Graffenburg Hill and constructed a reservoir in what is now Cornhill. This system was supplying 800,000 gallons per day by 1854. The Water Works operated the system until 1898. In 1898, the West Canada Water Works Company was formed and purchased the exclusive rights to furnish water to the City. A year later, the two companies were merged to become the Consolidated Water Company (“Consolidated”). Water Rights to the West Canada Creek were purchased. Consolidated constructed the Deerfield Reservoir in 1900 and in 1906 began supplying water from West Canada Creek through a 17-mile transmission main. Hinckley Reservoir was constructed by the State to supply the Barge Canal System in 1911. The last major open water storage reservoir was constructed in 1915 in Marcy. Consolidated also obtained the rights to 48.5 MGD from the Hinckley Watershed in 1917. Pursuant to a 1937 decision of the Water Power and Control Commission (“WPCC”), predecessor to the NYSDEC, which authorized the purchase, the City took direct control of the system in 1938 when it purchased Consolidated. In 1941, the City established the Utica Board of Water Supply (“UBWS”) as a separate entity under City jurisdiction to operate the water system. Major system construction projects under the UBWS included a second 17-mile, 36-inch diameter water transmission main completed in the 1970s and the 32 MGD WTP completed in 1992.

The 1937 decision of the WPCC granted certain rights to towns and villages receiving water service from UBWS. The interpretation of these rights resulted in numerous administrative and legal actions between the City and these towns and villages. Several disputes concerned the setting of water rates for customers inside and outside the City limits. The formation of the MVWA was undertaken to provide regional participation in the ownership, operation, governance, and financing of the Regional System, and resolved these complex issues. The creation of the MVWA also ensured a continued supply of sufficient high quality water to the City and portions of the 16 towns and villages, within the two-county service area.

The UBWS provided water service until 1996, when the MVWA assumed ownership and operations. The MVWA has since that time completed significant Regional System upgrades and consistently provided quality water service to its customers.

### **Area Served by the Regional System**

The MVWA’s service area is comprised of the City and all or part of the municipalities listed in the following table. As indicated by below, all customers of the Regional System, except for a portion of the Town of Westmoreland and Hamilton College in the Town of Kirkland, are served on a retail basis. Metered accounts for all users are read by the MVWA and water payments are made directly to the MVWA.

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**REGIONAL SYSTEM - LOCATION AND NUMBER OF METERED ACCOUNTS**

<u>Service Area</u> <sup>(1)</sup>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
City of Utica	19,091	19,163	19,190	19,151	19,193
Town of Deerfield	1,309	1,312	1,315	1,319	1,325
Town of Frankfort	290	292	291	291	291
Town of Kirkland	496	495	493	499	501
Town of Marcy (excluding Hamlet of Stittville)	2,162	2,218	2,248	2,265	2,286
Town of New Hartford	5,637	5,661	5,674	5,691	5,693
Town of Schuyler	373	374	376	379	381
Town of Trenton	259	265	263	264	266
Town of Westmoreland <sup>(2)</sup>	1	1	1	1	1
Town of Whitestown	3,079	3,087	3,098	3,107	3,114
Village of Holland Patent	172	171	173	172	171
Village of New Hartford	794	795	795	795	797
Village of New York Mills	1,327	1,320	1,323	1,316	1,322
Village of Oriskany	665	667	673	672	672
Hamlet of Stittville (Town of Marcy)	156	149	147	148	148
Village of Washington Mills	820	817	823	821	823
Village of Whitesboro	1,480	1,482	1,474	1,477	1,490
Village of Yorkville	1,093	1,096	1,096	1,097	1,102
<b>Total</b>	<b><u>39,204</u></b>	<b><u>39,365</u></b>	<b><u>39,453</u></b>	<b><u>39,465</u></b>	<b><u>39,576</u></b>

*Source:* MVWA Financial Reports, December 31, 2017 through 2021.

- (1) All are located in Oneida County, New York, except the Towns of Frankfort and Schuyler, which are located in Herkimer County, New York.
- (2) Westmoreland is the only community that is bulk-metered. It purchases water for resale within its service areas.

**Water Supply and Demand Analysis**

*Supply*

As noted above, the source of water for the Regional System is Hinckley Reservoir. The 25 billion gallon reservoir is a multi-use facility owned by the State. The reservoir is supplied by the 373 square mile Hinckley Watershed, 93% of which is located in the Adirondack Park. In addition to use by the Regional System, it is used as a supply of water for the Canal Corporation’s Erie Canal, for power generation by the NYPA and Brookfield Power Corp., and for flood control, recreation and environmental purposes.

The NYSDEC governs the allocation of water resources for public water supplies under Environmental Conservation Law through its water supply permit program. The NYSDEC issued a new WSP No. 9435 in 2014 to the MVWA that authorizes withdrawal of 32 MGD. This permitted withdrawal is based on the existing capacity of the MVWA transmission and treatment systems. Expansion of these systems would allow a new WSP to be issued for up to 48.5 MGD, which is the same amount of water that the UBWS and its predecessors were authorized to withdraw under a 1917 agreement with the State. MVWA’s water treatment plant average daily withdrawal was approximately 18.7 MGD in 2022.

NYPA operates a hydroelectric facility at the Hinckley Dam and the Brookfield Power Corp. operates a facility downstream at Trenton Falls. Each facility is operated cooperatively under the Federal Energy Regulatory Commission’s (“FERC”) authority. This cooperation is a written component of these FERC licenses to maintain adequate Reservoir water levels. NYPA also has a written protocol for the low flow adjustments. In the past, the then UBWS implemented an informal procedure to coordinate water withdrawals with Niagara Mohawk Power Corp. (now National Grid), NYPA, and the Canal Corporation to ensure a continuing supply of water for public consumption. MVWA has incorporated these procedures into its Emergency Response Plan.

*Demand*

Water consumed in the municipalities serviced by the MVWA over the previous reporting periods is shown in the following table:

**REGIONAL SYSTEM - HISTORICAL METERED CONSUMPTION**  
(in cubic feet)

<b><u>Municipality</u></b> <sup>(1)</sup>	<b><u>Fiscal</u></b> <b><u>2017</u></b>	<b><u>Fiscal</u></b> <b><u>2018</u></b>	<b><u>Fiscal</u></b> <b><u>2019</u></b>	<b><u>Fiscal</u></b> <b><u>2020</u></b>	<b><u>Fiscal</u></b> <b><u>2021</u></b>
City of Utica	234,191,200	238,719,500	227,317,800	214,028,800	213,155,700
Town of Deerfield	7,970,300	7,889,200	7,683,000	8,302,600	7,652,400
Town of Frankfort	5,662,800	5,360,100	5,589,800	4,256,300	6,884,600
Town of Kirkland	11,882,100	12,346,200	12,195,300	12,552,100	12,866,400
Town of Marcy (excluding Hamlet of Stittville)	48,727,600	50,179,100	48,276,400	47,137,900	53,561,500
Town of New Hartford	65,252,200	65,246,100	66,161,800	64,792,700	66,683,800
Town of Schuyler	6,424,100	5,774,000	4,708,800	5,979,200	5,713,600
Town of Trenton	7,435,700	7,652,900	7,818,100	6,523,300	7,552,700
Town of Westmoreland	706,500	1,984,000	2,154,400	1,937,000	854,600
Town of Whitestown	23,719,100	24,984,900	22,415,000	23,619,600	22,077,100
Village of Holland Patent	1,169,200	1,152,800	1,068,300	1,026,200	1,062,800
Village of New Hartford	6,769,100	7,096,500	6,912,500	6,432,200	6,323,200
Village of New York Mills	11,033,400	10,783,400	10,007,600	10,477,200	9,905,900
Village of Oriskany	5,729,500	6,401,300	6,707,300	6,544,900	6,168,300
Hamlet of Stittville	998,900	946,700	1,065,500	1,046,500	950,100
Village of Washington Mills	6,752,400	6,471,100	6,147,600	5,734,700	5,653,900
Village of Whitesboro	9,935,400	10,410,800	10,046,000	10,126,400	10,126,300
Village of Yorkville	8,505,300	8,493,600	8,315,000	7,981,200	7,745,400
<b>Total</b>	<b>462,864,800</b>	<b>471,892,200</b>	<b>454,590,200</b>	<b>438,498,800</b>	<b>444,938,300</b>

*Source:* MVWA Financial Reports, December 31, 2017 through 2021.

<sup>(1)</sup> All are located in Oneida County, New York, except the Towns of Frankfort and Schuyler, which are located in Herkimer County, New York.

The following table shows the average daily demand (“ADD”) for water consumption within the Regional System in recent periods. This quantity includes what was withdrawn from Hinckley Reservoir for all purposes, plus water used for filter backwashing during water production at the WTP.

**AVERAGE DAILY DEMAND<sup>(1)</sup>**

<b><u>Fiscal Year</u></b>	<b><u>ADD (MGD)</u></b>
2017	18.83
2018	19.34
2019	18.90
2020	17.42
2021	16.93

*Source:* The MVWA.

<sup>(1)</sup> Quantity of finished water produced at the water filtration plant and flowing into the distribution system.

The 20 largest monthly billed customers of the MVWA by annual water consumption for 2021 are shown in the table titled “Twenty Largest Monthly Billed Customers” below in this section. Combined, these customers account for approximately 22.74% of the total consumption and about 11.56% of the customer billings. Thus, the MVWA is not currently dependent upon one or two very large customers. The majority of the 20 largest monthly users are institutional customers (sewer district, correctional facilities, education, hospitals and apartment complexes) which are expected to be relatively long-term, stable customers of the system.

On September 23, 2019, Cree Inc., now known as Wolfspeed, Inc. (“Wolfspeed”), a semiconductor manufacturer based in Durham, North Carolina announced it would build and equip a state-of-the-art, highly automated 200 mm silicon carbide wafer manufacturing facility on the campus of the SUNY Polytechnic Institute in Marcy, New York. The wafers are being used to supply the electric vehicle market. The plant operation is highly water-intensive and is supplied from new water transmission lines connected to the MVWA water distribution system.

Wolfspeed has invested \$1 billion and received an additional \$500 million in State capital grants. Wolfspeed is approximately halfway to meeting its hiring goal of 600 employees. Construction and tooling of the plant was completed in the late spring of 2022 and production began in July 2022.

Water use by Wolfspeed has averaged nearly 700,000 gallons per day and is projected to remain at that level. It is estimated by the MVWA that Wolfspeed will be the largest customer of the Regional System in 2023. For additional information, see the Report of the Rate Consultant attached to this Official Statement as Appendix B.

*Impact of COVID-19 Pandemic*

During periods of the COVID-19 pandemic, governmental orders resulted in the closure of colleges, hotels, restaurants, and other businesses, public schools moved to remote learning, and limitations were imposed on large public gatherings.

In March 2020, then-Governor Cuomo issued an Executive Order requiring businesses to reduce their workforces by 50%. Although the MVWA fell into the exempt category as an emergency service, MVWA nevertheless complied with the Executive Order.



Each department was split into two teams that rotated in and out on a weekly basis. No employees were furloughed, and all employees were paid during their weeks off. This occurred for eight weeks until the then-Governor announced the first wave of the reopening process. At that point, all employees returned to work full time, but water maintenance crews were required to report to remote locations that were converted to temporary operations centers. As of July 2022, all water maintenance employees began reporting back to the central maintenance facility.

During the eight weeks of workforce reductions, all emergency repairs were completed in a timely manner, but some preventive maintenance efforts were temporarily postponed. Deferred maintenance was caught up within three months following the return to full staffing.

As a result of the economic shutdown, water consumption decreased 120 million gallons or 3.50% in 2020 compared to the previous year. In 2021, water consumption partially recovered with an increase of 48 million gallons or 1.50% compared to 2020. In 2022, consumption increased by 6.90% compared to 2020, reflecting both a recovery post-COVID and the initial usage from manufacturing at Wolfsped.

Despite the decrease in water consumption in 2020, water sales increased 1.30% compared to 2019 due in part to an increase in water rates. In 2021, water sales increased another 2.40% compared to 2020 the result of an increase in water consumption and rates. Overall revenue for 2021 increased 4.70% compared to 2020 as other fees and charges revenue recovered during the year.

Specifically, revenue sources consisting of penalties and delinquency charges decreased substantially in 2020, the result of provisions in the Governor's executive order to postpone imposing penalties for non-payment of water billings. This postponement carried over into May 2021 when penalties and delinquency charges were reinstated on outstanding water billings. For 2021, other revenue increased substantially exceeding 2020 other revenue by \$550,000 or 32.0%.

For 2020, operating expenses increased 7.30% compared to the previous year resulting in an overall increase in net position of \$1.3 million. For 2021, operating expenses decreased 5.20% compared to 2021 resulting in an overall increase in net position of \$3.8 million.

There continues to be some risk that the effects of the COVID-19 pandemic may adversely affect consumption and revenues in 2023 and subsequent years. The MVWA practice of maintaining a strong operating cash balance will help mitigate financial risks related to COVID-19 or other circumstances that may arise.

The future course of the pandemic is uncertain and will be determined by many factors, including vaccination rates, the effectiveness of vaccines in preventing infections, hospitalizations and deaths, adherence to public health mitigation measures, and the emergence of new virus variants. There can be no assurances as to what further impacts the pandemic may have on the population in the MVWA's service area or that new pandemic-related restrictions will not be imposed in the future. An outbreak of disease or public health emergency, including a resurgence of COVID-19, could have an adverse impact on water demand and usage and on the revenues of the Regional System.

**TWENTY LARGEST MONTHLY BILLED CUSTOMERS**  
**(For the twelve months ended December 31, 2021)**

<b>Usage Rank</b>	<b>CUSTOMER</b>	<b>Consumption (Cubic Feet)</b>	<b>Consumption (Gallons)</b>	<b>Billings</b>
1	Midstate Correctional Facility	22,492,100	168,252,604	\$ 554,211
2	Matt Brewing Company, Inc.	13,678,700	102,323,789	346,651
3	St. Luke's Hospital	13,310,200	99,567,217	339,466
4	Oneida County Sewer District	9,279,300	69,413,989	235,915
5	Hamilton College	7,613,500	56,952,939	190,397
6	Marcy Correctional	5,437,100	40,672,335	141,608
7	Masonic Home	3,142,600	23,508,282	74,213
8	Municipal Housing (Tilden Ave location)	2,714,900	20,308,864	84,218
9	Con Med Corporation	2,628,500	19,662,547	71,025
10	St. Elizabeth Hospital	2,613,300	19,548,843	82,556
11	Weston Foods	2,370,300	17,731,077	62,710
12	Wolfspeed (Micro-chip Plant)	2,153,900	16,112,292	71,578
13	Six Nations Apartments (formerly Intercoastal Prop.)	1,948,000	14,572,053	53,802
14	Wal-Mart Distribution Center	1,871,000	13,996,053	58,244
15	Adirondack Ridge Mobile Home Park	1,868,500	13,977,352	51,885
16	2200 Bleecker Street Properties	1,790,400	13,393,123	54,819
17	Utica College	1,661,500	12,428,884	52,713
18	Kennedy Plaza Apartments	1,601,300	11,978,557	46,445
19	Faxton Hospital	1,582,900	11,840,915	54,237
20	Office of Mental Health BSC 41534	1,408,900	10,539,305	42,988
Total		<b>101,166,900</b>	<b>756,781,020</b>	<b>\$ 2,669,681</b>

Source: MVWA Comprehensive Annual Financial Report, December 31, 2021.

*Leakage and Non-Revenue Water Use*

The MVWA tracks leakage and non-revenue water use (unmetered) throughout the distribution system. Current estimates as of December 31, 2022 are provided below:

Underground leakage <sup>(1)</sup>	18.0%
Fire-fighting	1.0
Construction activities	0.5
Street washing	0.2
Water main flushing	1.5
Water main breaks	19.6
Meter under-registration	3.6
<b>Total (approximately)</b>	<b>44.4%</b>

<sup>(1)</sup> The MVWA tracks leakage and non-revenue water on a weekly basis. While non-revenue water volume increased slightly during 2021 and 2022, records for calendar year 2022 indicate that it is again trending downward and remains well below the level of 2015. This is indicative of the positive benefits associated with the MVWA's annual leak survey and maintenance program. In addition, the MVWA has implemented an aggressive meter maintenance and replacement program in conjunction with the implementation of a radio-based meter reading system. Meter under-registration has been reduced as of the end of 2022.

The MVWA tracks unaccounted-for water in the distribution system. In 2022, the unbilled volume was determined to be 8.3 MGD (44.4% of ADD), a significant decrease from 2015 when there was 10.55 MGD (52.7%) unbilled volume. This unbilled volume is attributed to water main flushing, filter backwashing, plant processes, equipment and hydrant testing, firefighting, training fire fighters, street cleaning, and water main breaks and leakage. Additional details on the non-revenue water accounting are included in the MVWA's annual NYSDEC Water Audit on file at the MVWA and the NYSDEC. The MVWA has implemented a system to track non-revenue water. The following efforts are underway to accurately track non-revenue water:

- Fire Departments - Both training and firefighting usage will be tracked. The MVWA has begun an outreach effort with area fire departments to ascertain their training regimen and firefighting usage. At the request of the MVWA, the Utica Fire Department has modified their fire management software to track water use.
- Hydrant Permits - Usage is tracked by municipal and private use. A hydrant permit was created that requires increase reporting by permittees. Hydrant rings have been installed on permitted hydrants making it easier to determine unauthorized usage.
- Main Breaks - A process is being developed to estimate water loss occurring due to main breaks. The method would take into account main size and pressure, and the time from discovery to shut off. If the break is large enough, the MVWA's Supervisory Control and Data Acquisition (SCADA) System data would be used to help estimate the water loss due to the break. Currently, water losses due to main breaks are estimated based on total water flow increase in the system during the period of between discovery of the main break and its repair.
- Water Quality - Water used for flushing water mains and water storage tanks is being measured and recorded.
- District Meter Areas - MVWA activated its first District Meter Area (DMA) in the Village of Holland Patent in 2019. Two more are currently under development for the Hamlet of Washington Mills and the Luke Road Service Area. Water use in these areas will be closely monitored to track non-revenue water.
- New Water Meters- MVWA is currently pilot testing magnetic and sonic water meters to determine if they could be implemented throughout the system to track flow more accurately.

Continued implementation of the leak detection program will further reduce the amount of water withdrawn from the Hinckley Reservoir and filtered at the WTP. To this date, an assessment of the entire distribution system and the majority of the transmission mains have been performed at least once.

To improve the in-house leak detection program, the MVWA maintains leak detection equipment and has trained in-house personnel in its use. The equipment is used when leaks are suspected and/or when staff time allows a small-scope leak survey to be undertaken. In addition, the MVWA has installed five "Perma-loggers" in the distribution system which are designed to detect overnight water leakages using acoustics. The Perma-logger technology locates water system leaks over wide geographical areas. These have been installed on transmission mains for continuous monitoring purposes. An all-terrain vehicle has been purchased for use in monitoring and maintaining the Perma-loggers.

The MVWA's Emergency Response Plan specifies appropriate procedures to follow during interruptions of water supply, treatment, or distribution. Also included are Emergency Action Plans for their five impoundment dams (excluding the State-owned Hinckley Reservoir dam).

### *Consulting Engineer's Assessment*

The Consulting Engineer has prepared an engineering report (the "Engineering Report") that is included in this Official Statement as Appendix A. In its Engineering Report, the Consulting Engineer concludes that the supply of treated water is "sufficient"<sup>(\*)</sup> to meet the demands of the Regional System. The available supply of treated water is 32 MGD, about 40% greater than the current ADD of 18.9 MGD. The Regional System has significant storage in the distribution system (57.1 MG of total covered storage) to ensure adequate supply during peak demand periods.

### *Consulting Engineer's Conclusion*

In the Engineering Report, the Consulting Engineer concludes that the MVWA has the right to withdraw an adequate quantity of water from Hinckley Reservoir to serve the Regional System and growth forecast for the next 20 years. The Hinckley Reservoir safe yield has demonstrated over time to have adequate quantities of raw water for treatment. The MVWA does not plan to expand treatment capacity at the WTP until ADD approaches 30 MGD.

In the opinion of the Consulting Engineer, the supply, treatment, and distribution system capacity is sufficient to meet the Regional System's forecasted needs over the next five fiscal years.

### *Facility Descriptions and Evaluations*

In conjunction with the preparation of previous studies and reports, all major system facilities were previously evaluated through interviews with various Regional System personnel and some were previously physically reviewed by the Consulting Engineer. In the Engineering Report, the Consulting Engineer concludes that all facilities are sufficient to meet the needs of the service area over the next five fiscal years. This opinion assumes continued implementation of the recommended five-year capital improvement program (the "CIP"). For additional information about capital improvements and associated costs, see "CAPITAL IMPROVEMENT PROGRAM" herein and the section titled "Capital Improvement Program" in the Engineering Report of Consulting Engineer attached hereto as Appendix A.

### *Treatment Facilities*

The Regional System includes nine active water treatment facilities. The main treatment facility is the WTP located in the Town of Trenton approximately 16 miles north of Utica. This facility was placed into service in 1992 at a cost of \$17 million. The WTP is the initial treatment facility for all water in the Regional System, with a capability to treat up to 32 MGD. The WTP has four parallel treatment process trains and can provide the design capacity of 32 MGD with one process train out of service for maintenance or cleaning. The treatment process, approved by the New York State Department of Health ("NYSDOH"), includes chemical pretreatment followed by upflow clarification and high rate of filtration through granular activated carbon filters. The original mixed filter media was changed to granular activated carbon ("GAC") to improve organics removal, which has increased water use (backwashing) and operating cost. MVWA replaces all GAC filter media annually. Final disinfection is provided by gas chlorination. A project to replace the existing gas chlorination system with a liquid chlorination system is currently underway and completion is anticipated in 2023. Fluoride is also added along with lime and soda ash for pH adjustment and corrosion control. New covered storage tanks and the corresponding removal of open reservoirs

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<sup>(\*)</sup> A "sufficient" rating is the highest possible rating given by the Consulting Engineer. It is defined in the Engineering Report to mean that the subject facilities have the capabilities of meeting current and future demands for the next five years.

continue to reduce the need for corrosion control chemicals. Alternative methods of corrosion control are currently being studied by Corona Environmental Consulting.

A Facility Evaluation of the WTP was completed in November 2012. Recommended upgrade and replacement projects from this study are continually being incorporated into the CIP. An upgrade to the corrosion control system is planned for 2023.

The remaining treatment facilities are the Deerfield Chlorination Station, the Marcy Chlorination Station (at Marcy Reservoir), the Hinckley Chemical Treatment Station (near Hinckley Dam), the Prospect Soda Ash Silo, the Southern Reservoir Pump and Chemical Feed Station, the Hangar Road Chlorination Facility, the Mallory Road Chlorination Station (Marcy) and the Higby Road Pump & Chlorination Station. These facilities are primarily used to maintain or enhance water quality prior to its delivery to the system customers. They include chlorination stations for disinfection and chemical addition for corrosion control. The inactive treatment facilities are the Ammonia Stations in Trenton, the Deerfield Reservoir and the Pleasant Street Chemical Treatment Station. The WTP and most satellite stations operating conditions have been incorporated into the SCADA system.

#### *Pumping Stations*

The Regional System has twenty pump stations of various types including in-line, booster, and hydropneumatic systems. Nineteen are owned by the MVWA, and one is owned by the Town of Frankfort. Fifteen of the pump stations are in-line and booster pumps, which maintain specified system pressures while delivering large volumes of water to supply fire flows, fill water storage tanks, and sustain water demand. Seven of the pump stations are hydropneumatic systems, which are smaller facilities capable of providing domestic water to a relatively small number of users, but are not typically used to provide fire flows or replenish storage tanks.

A new pump station is in the planning stages for the MVWA High-High pressure system and the station is anticipated to be located near the intersection of Higby and Oneida Streets. This new station will act as a back-up to the Route 12 and Valley View Pump stations.

The MVWA CIP includes upgrading a few pump stations per year plus numerous smaller improvement projects.

#### *Water Storage Reservoirs*

The source of raw water supply for the Regional System is the Hinckley Reservoir, which is owned by the State. Additionally the Regional Water System includes five earthen impoundment open storage finished water reservoirs. Of the five reservoirs, three are in active-standby status (Deerfield, Marcy and Southern – No. 4) and two are out of service (Southern Nos. 2 and 5). Plans are being developed to decommission the Southern #5 reservoir. The Marcy reservoir was successfully decommissioned in 2020. Southern #5 is to be drained, and Southern #2 is to be converted to a stormwater basin.

#### *Storage Tanks*

The Regional System has 28 water storage tanks in active service with a combined storage volume of 57.7 million gallons including the second Clearwell at Hinckley WTP, the Marcy Tank, Trenton Road Tank, and the Toby Road Tanks. The tanks maintain system pressures and provide water storage for daily use, emergencies, and fire protection. Materials of construction include welded or riveted painted steel, bolted glass-fused-to-steel plates, and pre-stressed concrete.

The MVWA conducts a tank maintenance program to inspect and clean its tanks every five years using potable water divers. Approximately five tanks are inspected and cleaned each year under the diving program.

Projects currently in planning or design include five new tanks, including two 12-15 MG tanks on Cavanaugh Road and Toby Road sites. A new 1.2 MG concrete tank is in service on Snowden Hill to serve the High Zone.

#### *Meter Stations*

There are 33 master meters located throughout the Regional System that measure the amount of water distributed to primary service areas. In addition, there are 11 pump stations with elapsed time meters that are used to approximate total flows.

The majority of the projects identified under the CIP are minimal and generally consist of minor interior pipe, valve, and instrumentation replacements, as well as minor building repairs. Meter flow rates are incorporated into the SCADA system.

The CIP includes the evaluation for the possibility of using an Advanced Metering Infrastructure (AMI) system at many of the meter station locations as opposed to their current system. Also as indicated in the CIP are five new meter stations located at the following locations: Hayes Road Meter Station, Hinman Road Meter Station, Luke Road Metering Station, Mapledale Meter for Water District 1, 2, and 3, and Marcy Transmission Main.

#### *Regulating Stations/Altitude Valves*

There are 59 regulators located at 32 regulating stations throughout the Regional System including the Deerfield Tank Control Building. The regulating stations are designed to prevent excess water pressures from occurring within the transmission and distribution system. In the Engineering Report, the Consulting Engineer has found that many of these facilities have been identified for various upgrades and numerous capital improvement projects. A regulating station is planned for reactivation and upgrades to provide a second feed to the Town of Frankfort. In 2016, by-pass piping was installed by MVWA.

The Regional System also has 16 altitude valves typically located at each water tank that is not supplied by pumping. The altitude valves function to regulate the flow in and out of the water tanks. In the Engineering Report, the Consulting Engineer has found these facilities to be in good repair, and other than normal maintenance, no significant capital improvements were identified by the Consulting Engineer.

MVWA has installed 30 remote pressure monitoring units at regulating stations and altitude valves to reflect inlet/outlet pressures and valve positions. This data is relayed to MVWA's updated SCADA system. MVWA has also installed six smart hydrants for pressure monitoring of an area of the distribution system prone to leaks, which are also tied into the SCADA system.

#### *Transmission and Distribution Mains*

The Regional System includes approximately 700 miles of transmission, supply, and distribution mains (the latter are typically 12-inches and smaller in diameter). The oldest water mains are generally located within the City and Villages of Yorkville, Whitesboro, and New York Mills. The majority of new distribution main construction has been to serve expanding areas within the Towns of Deerfield, Whitestown and New Hartford. Costs for this design and construction have been borne primarily by the respective towns. Where modifications to town projects will provide a regional benefit, the MVWA has provided financial

contributions to pay for increased capabilities. Upon completion of town projects, the water infrastructure is turned over to the MVWA for ownership and operation. Debt service remains the responsibility of the respective town. The most recent CIP includes \$3,900,000 allocated to water main replacement projects in Fiscal Year 2023.

The Geographic Information System-based (GIS-based) prioritized inventory of water main replacement project is currently being updated and provide scheduled main replacements. This inventory accounts for various parameters such as pipe age, size, material, leakage, and break history.

Parallel 24-inch and 36-inch diameter transmission mains extend from the Hinckley Reservoir to the WTP. A study of the raw water transmission main facilities and capabilities was completed that reviewed alternate main sizes for a third raw water transmission main from the Hinckley Reservoir to the Hinckley Water Treatment Plant in Prospect, NY. In addition, the study reviewed the affect that Reservoir elevation would have on capacity, the ability to transmit up to 48.5 MGD, and the impact of the main size on the hydro-turbine facilities. MVWA continues to plan for future upgrades and maintenance to the existing raw water transmission mains. A \$3,000,000 Water Infrastructure Improvement Act grant was awarded for the replacement of 5,000 LF of 54" diameter raw water main from the Hinckley Reservoir intake to the WTP (Phase II of the Raw Water Main Project). The total estimated cost for Phase II of the Raw Water Main Project was \$10,000,000 in 2020. \$7,000,000 in costs of Phase II of the Raw Water Main Project were funded with proceeds of the Series 2020A Bonds. However, delays and supply chain price escalations relating to the COVID-19 pandemic have increased the total cost by \$5,000,000, which is expected to be funded with proceeds of the Series 2023 Bonds. Design of Phase II of the Raw Water Main Project is nearly complete. It is expected to be bid and awarded during the summer of 2023 and completed by the end of the 2023 calendar year. For additional information, see "GREEN BONDS – Series 2023 Bonds."

Finished water is conveyed through extension of the same 24-inch and 36-inch transmission mains, including some 30-inch diameter pipe, from the WTP to the Marcy and Deerfield Reservoir sites. These lines are interconnected at intervals of one to two miles. Approximately 2,000 linear feet of 24-inch diameter water mains were constructed as part of the Cavanaugh Road bypass transmission main, which is now complete. Valves are located such that any one segment of either line could be taken out of service without affecting the flow through the balance of the pipeline. The entire water transmission system from Hinckley operates without the use of pumps due to the difference in elevations between the Hinckley Reservoir and the Toby Road, Marcy, Deerfield and Southern Reservoirs sites.

The Regional System operates principally on four different major service zones in the service area due to the change in elevation across the geographic area. Tanks and pump stations are necessary to provide service to the two major service zones at higher elevations.

The lowest elevation of the distribution system, the Low Service Zone, generally comprises the area along the Mohawk River from Oriskany through downtown Utica eastward into the Town of Frankfort. The Low Service Zone is supplied from the Deerfield Tank with parallel 20-inch and 30-inch feed lines connecting to the distribution system and the Southern Reservoir on Pleasant Street in the Town of New Hartford.

The next higher elevation in the distribution system, the area designated as the Intermediate Service Zone, is served either by the 24-inch line or 30-inch line from the Marcy Tank with pressure regulated at the Maynard Station. This zone generally serves the areas in the Town of New Hartford, Town of Whitestown and the City south of Burrstone Road.

Higher elevations in the southeasterly portion of the distribution system include two service zones, “High” and “High-High”, which are served by pumps and storage tanks utilizing stored water in the Sanger Avenue, the Sherrillbrook Park, the Cascade Drive (Southern Reservoir), and Valley View Road Tanks. The Upper Higby Tank in the Town of Frankfort serves primarily customers in the Town of New Hartford. This minor service zone is termed the “Upper Higby Tank Service Zone”.

The transmission and distribution system is capable of meeting peak water demands in each of the Low, Intermediate, High, and High-High Service Zones.

The MVWA has a GIS based hydraulic model of the entire Regional Water System using InfoWater™ by Innovyze. InfoWater™ is a nationally recognized software program that provides a high level of accuracy in assessing and evaluating the hydraulic performance of the water system. The model is also a valuable tool for planning system expansions and in support of economic development. The effort of developing the model included field location using Global Positioning Satellite, or “GPS,” technology, of valves, hydrants, etc. as well as hydraulic modeling and calibration to within acceptable standards. The hydraulic model is also used to identify sampling points for MVWA’s required testing under U.S Environmental Protection Agency (“EPA”) Disinfection By-Products Rule.

#### *Hydroelectric Generating Facilities*

The MVWA owns and operates two hydroelectric generating facilities. Both are single, in-line turbine plants with a combined installed capacity of 450 kilowatts. One is located within the WTP and the other is located approximately one mile downstream on the transmission mains. They were constructed at the same time as the WTP. Both have piping and valving for bypass operations to permit maintenance or when the hydraulic conditions do not permit their satisfactory operation. Both facilities are owned and operated by the MVWA. These facilities are inspected annually by a high voltage electrical services contractor. The buildings associated with the hydroelectric generating facilities are maintained by the MVWA’s Maintenance Department. The MVWA has evaluated the economic feasibility of installing one or two additional on-line turbines on the transmission mains.

A third turbine is located at the Deerfield Tank and Reservoir site. This is a hydro-turbine, driven by potable water flow, and is directly coupled to the Reservoir’s recirculation pump. As a result of the use of hydro-power, the cost savings to the MVWA is approximately \$15,000 per year in electrical costs.

#### *Other Facilities*

Facilities that do not fall into the above categories include: the two raw water pipe bridges that support the two 20-inch diameter steel water mains that cross the West Canada Creek leading to the WTP, the intake structure at the Hinckley Dam, the Kemble Street Maintenance Shop and Yard facility in Utica, the Hinman Road Storage Building, the Southern Reservoirs Keeper’s House & Garage, Old Southern Pump Station, the Prospect Pool Intake (never utilized, standby service only), the Marcy Reservoir Garage/Equipment Building and the Southern Reservoirs Interconnection Station. Also included under this category are the Regional System operational improvement projects including system-wide SCADA and GIS for the watershed and distribution system, and the MVWA’s administrative offices including headquarters and maintenance facilities.

#### *Cybersecurity*

The MVWA, like many other public and private entities, relies on technology to conduct its operations. As a recipient and provider of personal, private, or sensitive information, the MVWA faces multiple cyber threats including, but not limited to, hacking, viruses, malware and other attacks on computer



and other sensitive digital networks and systems. To mitigate the risk of business operations impact and/or damage from cyber incidents or cyber-attacks, the MVWA invests in various forms of cyber security, technical, and operational controls; however, no assurances can be given that such security and operational control measures will be completely successful to guard against cyber threats and attacks. The results of any such attack could impact business operations and/or damage MVWA digital networks and systems and the costs of remedying any such damage could be substantial.

MVWA sent out a request for proposal for a review of its cyber security network and, after evaluating the proposals, selected IBM in December 2017 to provide the cyber security review. IBM completed the evaluation and created a report of findings and recommendations. MVWA is currently implementing IBM's recommendations as part of a 4-year phased implementation plan at a cost of approximately \$300,000 to \$400,000 annually.

## **CAPITAL IMPROVEMENT PROGRAM**

### *Capital Improvement Program*

The Consulting Engineer has evaluated the capital improvements necessary for the Regional System to meet the demands of the users through Fiscal Year 2027. The five-year CIP is revised and updated periodically throughout the year by the MVWA to reflect projects completed and new projects that are planned. The MVWA's Capital Projects Committee, in conjunction with the Principal Engineer, develops the CIP, from which a specific list of projects is typically selected for financing with sources of funds. These sources include bond funds and self-financing from operational funds. Certain capital projects will be funded with proceeds of the Series 2023 Bonds. See "INTRODUCTION – General" and "GREEN BONDS."

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As of February, 2023, the proposed CIP for the current and next four Fiscal Years, as reflected in the Engineering Report included as Appendix A to this Official Statement, is delineated in the table below:

<u>Facility</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Est. 5-Yr. CIP Cost</u>
<b>Treatment Facilities</b>	\$390,000	\$100,000	\$1,580,000	\$350,000	\$285,000	\$2,705,000
<b>Pump Stations</b>						
A. Pump Station Upgrades	--	\$100,000	\$650,000	\$275,000	--	\$1,025,000
B. New Pump Stations	--	--	--	--	--	--
<b>Open Reservoirs</b>	--	\$40,000	\$430,000	--	--	\$470,000
<b>Storage Tanks</b>						
A. Tank Upgrades	\$560,000	\$690,000	\$245,000	\$250,000	\$1,200,000	\$2,945,000
B. New Tanks (storage)	--	--	--	--	\$1,000,000	\$1,000,000
<b>Metering Stations</b>						
A. Metering Station Upgrades	\$50,000	--	\$50,000	--	\$150,000	\$250,000
B. New Metering Stations	--	--	\$270,000	--	--	\$270,000
<b>Regulating Stations</b>						
A. Regulating Station Upgrades	--	\$515,000	\$31,000	\$30,000	\$10,000	\$586,000
B. New Regulating Stations	--	--	--	--	\$275,000	\$275,000
<b>Transmission Mains &amp; Distribution</b>						
A. Cleaning, Lining, and Repairs	\$1,000,000	\$1,000,000	\$1,000,000	\$1,300,000	\$1,300,000	\$5,600,000
B. Replacement	\$3,900,000	\$3,000,000	\$650,000	\$150,000	\$700,000	\$8,400,000
C. New Transmission & Distribution Mains	--	\$200,000	\$950,000	\$2,000,000	\$500,000	\$3,650,000
<b>Other Facilities</b>						
A. Facility/Security Improvements	\$80,000	\$115,000	\$1,030,000	\$170,000	--	\$1,395,000
<b>Totals</b>	<b><u>\$5,980,000</u></b>	<b><u>\$5,760,000</u></b>	<b><u>\$6,886,000</u></b>	<b><u>\$4,525,000</u></b>	<b><u>\$5,420,000</u></b>	<b><u>\$28,571,000</u></b>

Source: MVWA Capital Improvement Program.

Notes:

1. The Capital Improvement Program as presented above reflects contractual commitments in each year by type of facility.
2. The Capital Improvement Program as presented above includes the cost of outside engineering services but does not include MVWA in-house engineering costs, paving, hydrants, meters and vehicles and equipment. The annual costs associated with these requirements are expected to be cash-financed.

### *Water System Expansion Plan*

The Consulting Engineer notes in the Engineering Report that MVWA has draft plans to expand its water system capacity from 32 MGD to 48.5 MGD in order to accommodate potential new development at the Marcy Nanocenter or other areas. As part of the proposed capacity expansion, the MVWA has draft plans to expand, if necessary to accommodate a new major industrial manufacturer, its WTP, add two new

15 MG water tanks, two new smaller system tanks, a new 54-inch raw water main, new 24-inch and 48-inch finished water main, and conduct various other repairs to existing water mains. The cost of these improvements is projected to be approximately \$150 million and is currently not included in the CIP budget. The MVWA long range CIP budget for fiscal years 2023 through 2037, which does not include the water system capacity expansion plan, is \$100,341,000. For additional information, see the Engineering Report included as Appendix A to this Official Statement.

### **MVWA ORGANIZATION AND STAFF**

The employees of the MVWA have the appropriate backgrounds and experience to operate the Regional System. The personnel positions of the MVWA and the corresponding staffing figures for each are as follows:

<u>Description</u>	<u>Number of Staff</u>
<b>Administration</b>	
Executive Director	1
Comptroller/ Deputy Comptroller	2
Internal Auditor	1
Personnel Director	1
Customer Service	7
Meter Reading	2
Information Technology	6
Accounting and Billing	3
Administration Support Staff	1
Safety Officer	1
Administration Subtotal	25
<b>System Maintenance</b>	
Water System Maintenance	38
Meter Shop	4
Engineering	8
Water Distribution	5
Lab Operations and System Monitoring	7
Maintenance Support Staff	2
System Maintenance Subtotal	64
<b>Total Employees</b>	<b>89</b>

*Source:* MVWA Human Resources.

#### *Union and Labor Relations*

The MVWA employees are members of one of two unions, with the following exceptions: the Executive Director, Comptroller, Director of Engineering, Research Scientist, Director of Personnel, Personnel Tech, Watershed Coordinator, the Internal Control Analyst, the Executive Secretary, Director of Water Quality, and four other staff members (16 in total). The International Brotherhood of Teamsters, Local Union 294, represents the office staff, operations staff, field labor staff, and foremen. The Management Employees Association represents the remainder of employees.

The present agreement with the International Brotherhood of Teamsters Local Union 294 was approved in February 2023 with an expiration date of December 31, 2025.

The Management Employees Association's (MEA) present contract was renewed in Spring 2022 with an expiration date of April 1, 2024.

In 2017, the MVWA made the decision to outsource the operation of the WTP. As of August 1, 2017, MVWA entered into a Contract Operations agreement with the international engineering firm of Suez-North America, which was acquired by Veolia, a company headquartered in France ("Veolia"). The MVWA operations contract with Veolia was renewed in December 2022 for another five-year term. The contract can be renewed for two additional five-year terms for a total of twenty years.

Under this agreement, the MVWA continues to own the WTP and funds major capital improvements. Veolia staffs the plant with its own employees and has taken on all responsibility for water purification and regulatory compliance. Of the eight MVWA employees who had operated the plant previously, six accepted employment with Veolia and the remaining two opted to retire. Operating expenses for the WTP are billed back to MVWA through monthly operating reports.

The management team of the MVWA and other key positions are described below:

- **Executive Director:** The Executive Director is responsible for the management of the Regional System. He also supervises a wide variety of construction, maintenance, operations, engineering, water treatment, and business management activities. This individual reports directly to the Board of Directors of the MVWA.

The Executive Director is Mr. Patrick Becher. Mr. Becher graduated from SUNY Oswego with a B.S. in Business Administration. Mr. Becher was previously Administrator with the City of Syracuse Water Department for 8 years, and was Director of Operations for 4 of those years. After his position at the Water Department, Mr. Becher was the Budget Director for the City of Syracuse. He has been employed by MVWA since September of 1997, having served in his current capacity for more than 25 years.

In addition to his duties with the MVWA, Mr. Becher is on the Board of Directors of both the Mohawk Valley Economic Development Growth Enterprise (MV EDGE) and the Greater Utica Chamber of Commerce.

- **Comptroller:** The Comptroller is responsible for coordination and administration of the MVWA's financial management functions. The Comptroller reports dually to the Board of Directors and the Executive Director.

Mr. James C. Korfonta, CPA, has been the Comptroller of the MVWA since March of 2000. Mr. Korfonta is a graduate of Hamilton College and received a Master of Science degree in Professional Accounting from the University of Hartford, Connecticut.

- **Deputy Comptroller:** The Deputy Comptroller is responsible for those duties as may be delegated by the Comptroller, including accounting, billing and financial management functions. This individual reports to the Comptroller.

Mr. Scott Gorgas, CPA was named Deputy Comptroller in June of 2011. Prior to that, he served as Director of Finance for University Auxiliary Service at the University at Albany. Mr. Gorgas is a graduate of SUNY Institute of Technology with a Bachelor of Science degree in Accounting/Finance and Masters of Science degree in Accounting.

- **Principal Engineer:** The Principal Engineer (position formerly titled Director of Engineering) is responsible for general planning, permits/compliance, design activities, system extensions and plan approvals, and development and implementation of the CIP. The position includes establishing

design standards, and the scoping, approval, design and bidding of capital improvement engineering projects. This individual reports to the Executive Director.

The former Director of Engineering, Richard Goodney, P.E., who served 22 years with the MVWA, retired in January 2021. His replacement, Eric Schuler, P.E., was hired in January 2021 and resigned voluntarily to accept employment elsewhere in December 2022. Since then, the Executive Director has served as the administrative department head, coordinating the activities of the engineering staff. Recruitment efforts for a new Principal Engineer remain ongoing with the goal of filling this position by April 1, 2023.

- **Director of Water Quality:** The Director of Water Quality is responsible for coordination and administration of water treatment and purification activities. The agreement with Veolia for daily operations and maintenance at the WTP is under the direction and supervision of the Director of Water Quality. The Director of Water Quality is also the Technical Director of MVWA's state-certified water laboratory and is responsible for distribution system water quality and related regulatory compliance programs. The Director of Water Quality reports to the Executive Director.

The Director of Water Quality is Philip A. Tangorra. Mr. Tangorra is a graduate of St. John Fisher College and holds a Masters degree in Aquatic Ecology from SUNY Brockport. Previously, he held the position of Senior Water Quality Analyst for 4 years before assuming the position of Research Scientist in 2002. He possesses both NYSDOH 1A and D water operator licenses. Mr. Tangorra currently serves on the Board of Governors for the New York Section - AWWA and became Chairman of the Board in April 2019.

- **Water Maintenance Engineer:** The Water Maintenance Engineer is responsible for the overall maintenance of the distribution system, sites and facilities, and properties. The position is also responsible for management of the Maintenance Department, including, planning and managing non-routine maintenance, capital improvement, and project work undertaken by the department. The Water Maintenance Engineer reports to the Director of Engineering.

The Water Maintenance Engineer position is currently vacant after the resignation of the last incumbent in September 2021. The responsibilities associated with planning and managing capital improvement projects were transferred to the new position of Civil Engineer I, which was filled in January 2022. Other project design responsibilities have been conducted with the use of consulting firms on a task order basis. The position is expected to be filled from within the MVWA in early 2023.

- **Watershed Coordinator:** The Watershed Coordinator is responsible for managing the watershed master plan and continued development of a watershed-wide and water distribution geographic information system (GIS). This individual reports to the Director of Engineering.

The Watershed Coordinator position is currently vacant after the resignation of the last incumbent in August 2022. Since, then, consulting firms have performed duties previously performed by the Watershed Coordinator. Upon completion of the consulting firms' projects, it is anticipated that the Watershed Coordinator position will be changed to an engineering position to perform GIS functions and other engineering support functions. The new position is expected to be filled in April 2023.

- **Water Maintenance Supervisor:** The Water Maintenance Supervisor plans and supervises the maintenance and extension activities of the Regional System. This individual reports to the Director of Water Distribution.

The Water Maintenance Supervisor is Mr. Bill Carroll. Mr. Carroll was promoted to the position of Water Maintenance Supervisor in 2015. He has been employed by the MVWA Maintenance Department for more than 25 years in various increasing levels of responsibility

within the Maintenance Department. Mr. Carroll holds an Associate's degree in Construction Technology from Alfred State College. Prior to joining the MVWA, he worked for the Oneida County Department of Public Works, Lupinni Construction and was self-employed as a contractor.

- **Customer Service Coordinator:** The Customer Service Coordinator is responsible for the general management of the office as it relates to all aspects of customer service, including developing a proactive customer relations program. The Customer Service Coordinator reports to the Executive Director.

The Customer Service Coordinator is Ms. Anne Milograno. She has been with the Regional System since March 2011. Ms. Milograno is a graduate of St. Bonaventure University with a B.B.A. degree in Business Management. Prior to joining MVWA, Ms. Milograno spent 30 years working in the financial industry, in the print industry and with local non-profit organizations in supervisory roles in customer service and sales.

- **Administrative Officer for Maintenance Facility:** This position is charged with overseeing and managing the maintenance staff assignments, purchase requisitions, and inventory control. This individual reports to the Director of Engineering.

The Administrative Officer for Maintenance Facility is Mr. Steven Gassner. He has been with the Regional System for about 20 years. Mr. Gassner is a graduate of SUNY Institute of Technology at Utica/Rome with a B.S. degree in Business and Public Management. Prior to joining the MVWA, Mr. Gassner spent 14 years in private industry in various customer service positions and then about 9 years with MVWA as the Customer Service Coordinator.

- **Director of Information Systems:** The Director of Information Systems is the Network Administrator and is responsible for the computer hardware and operating software for the MVWA's computer systems, as well as staff computer-related training. This individual reports to the Executive Director.

The Director of Information Systems is Mr. James Mack. Mr. Mack graduated from Utica College with a B.S. degree in Computer Science. He has held this position for more than 25 years. Prior to joining the MVWA in 1985, he was employed by the City for over 10 years as Senior Programmer.

- **Safety Officer:** The Safety Officer is responsible for the development, implementation, and enforcement of a safety program covering employees as well as planning, developing, and conducting safety seminars and training programs. The work is performed in accordance with established policies and procedures including OSHA regulations and maintains records to satisfy OSHA and Toxic substances reporting requirements. The Safety Officer inspects work areas and public facilities to identify and correct conditions which pose significant risk of accidental injury to employees and general public. Safety Officer is responsible to assist in the investigation of accidents on property to determine causes and develop appropriate remedial actions. This position reports to the Executive Director.

The Safety Officer is Mr. Joseph Piazza. Mr. Piazza possesses a Bachelor's degree from Southern University and is a retired police officer. In his law enforcement career, he was a NYS certified General Topics Instructor, and a Patrol Rifle, Taser, and Firearms Instructor. He also worked as a training and safety officer for Birnie Bus, Inc., has certifications as a defensive driving instructor, and has taught a variety of safety coursework in affiliation with the National Safety Council.

- **Director of Personnel:** The Director of Personnel is responsible for all personnel related functions, including the development and implementation of Personnel Policies and Procedures including health and safety, and environmental compliance with Federal, State, and local regulations. This

individual also coordinates hiring activities, participates in labor relations functions, and maintains all employment records. The Director of Personnel reports to the Executive Director.

The Director of Personnel is Ms. Sandra Dare. Ms. Dare joined the MVWA in February 2023. Ms. Dare possesses a Master of Business Administration degree from the SUNY Institute of Technology, and a Bachelor of Science degree from LeMoyne College. Ms. Dare was formerly the Deputy Commissioner of Civil Service for Oneida County, NY and more recently was the Personnel Director for a large industrial metal recycling firm, Empire Recycling, with multiple locations across upstate New York. She has twelve years of experience in personnel management in both the public and private sectors.

## GOVERNMENT REGULATIONS

### Regulatory Requirements

Water produced by the MVWA is subject to the requirements of a number of federal and State regulations. These regulations include the Federal Safe Drinking Water Act (“SDWA”) and the State Sanitary Code. The SDWA established National Interim Primary Drinking Water Regulations, which cover contaminants that have adverse effects on human health. The regulations are under the jurisdiction of the EPA. The SDWA also developed Secondary Drinking Water Regulations that cover contaminants that adversely affect the aesthetic quality of drinking water, such as taste, odor and appearance. The NYSDOH has been granted authority by the EPA to monitor and enforce all federal and State regulations.

#### *Drinking Water Standards*

In the Engineering Report, the Consulting Engineer concludes that the MVWA is currently meeting or exceeding all State and federal water quality standards.

The Water Quality Department annually publishes a Drinking Water Quality Report for the preceding year. The MVWA also completes the Consumer Confidence Report. Both reports are available on MVWA’s website at [www.mvwa.us](http://www.mvwa.us).

The MVWA Water Quality Department continues to direct treatment operations at the WTP through an agreement with Veolia. The laboratory operates to analyze and control distribution system water quality and as a commercial laboratory offering water quality testing to private homeowners, home inspectors, other utilities, and regulatory agencies. The Water Quality Department continues to monitor the Hinckley watershed, source water for the Regional System, on a regular basis.

The MVWA Water Quality Laboratory has been expanded to meet the growing concerns for safe water. The laboratory is accredited through the NYS Environmental Laboratory Approval Program (ELAP) and carries secondary accreditation in Pennsylvania as well. The lab expanded the number of accredited analytes in 2020.

Additionally, the department continues to actively participate in identifying water quality characteristics and potential solutions with neighboring utilities. It has directed the water quality sampling and monitoring efforts and coordinated populating the associated database to allow for managerial decisions to be made by those neighboring utilities and consultants.

Besides ensuring that routine monitoring requirements are met by the system, the Water Quality Laboratory is engaged in a variety of research projects related to emerging contaminants, utility management, and innovative practices for successful utility operations.

EPA promulgated the Lead & Copper Rule Revisions (“LCRR”) in December of 2021. This regulatory framework provides additional measures to reduce lead exposure from drinking water and better protect public health. The LCRR has many facets for utility compliance including lead service line identification, increased monitoring and/or treatment of lead in drinking water starting in 2025, creation of a “trigger level” that if exceeded, while not a violation, will require additional protective measures, lead service line replacements, and enhanced public education and awareness.

Two intensive requirements immediately impacting the MVWA’s compliance are completing a lead service line inventory and re-optimization of corrosion control. The inventory must detail all lead service lines on both the homeowner and utility-owned sides and this database must be publicly available on the MVWA website by October 16, 2024. Historical data suggests that MVWA will not comply with the newly established trigger level and will need to reoptimize its corrosion control strategy for lead reduction and evaluate the use of phosphates to control lead release. To this end, the MVWA has engaged with Corona Environmental Engineers of NY to coordinate a pipe loop study to evaluate the use of orthophosphate as a control for lead release. The project requires many hours of staff time for study design and construction, sample collection & analysis, data evaluation, and coordination with state and local regulatory agencies. The project is anticipated to last from 18-24 months.

Additionally, EPA advised when the LCRR was announced that the rule was not aggressive enough towards the agency’s goal of reducing lead exposures. EPA is committed to issuing a follow-on rule to be known as the Lead & Copper Rule Improvement (“LCRI”) by the time compliance with the LCRR begins in 2025. The MVWA cannot predict the contents of the LCRI or what effect the LCRI may have on the MVWA.

#### *Cross Connection Control*

State water suppliers are required by the NYSDOH to maintain cross connection control (“CCC”) programs. The programs’ purpose is to protect the public safety from contamination by misuse, whether inadvertent or otherwise. The program includes conducting a hazard survey of users and requirements for installation of special valves on water service lines to prevent users’ water from returning to the public water distribution system. The number of backflow prevention devices on MVWA services has increased from about 200 in 2001 to 1,632 as of the end of July 2022. NYSDOH requirements for annual testing of these devices are being emphasized. The MVWA’s Engineering Department reviewed staffing levels necessary to efficiently continue, as well as expand, the CCC program and its responsibilities for public health, security and operational effectiveness and determined current staffing levels were adequate.

#### *Water Supply Permit (WSP)*

NYSDEC issued a WSP in 1996 to the MVWA authorizing withdrawal of water from the Hinckley Reservoir and operation of the Regional System. The WSP requires that the MVWA conduct an annual water system audit to determine an accurate quantity of unaccounted-for-water and a study of the system to determine the quantity of leakage. It is further required that the MVWA maintain a program for reduction of the leakage which includes an annual leak detection program performed by an outside consultant for the entire distribution system using specialized sound detection equipment to locate underground leaks. For the calendar year of 2022, a total of 253 water main leaks were reported and repaired. In addition, 187 fire hydrants were repaired for either leakage or damage due to traffic accidents. There were also 69 leaks discovered and repaired on service pipes leading into private dwellings or businesses. This information is reported annually to the NYSDEC and the WSP remains in effect.



### *Discharge Permit*

The WTP operates under a NYSDEC wastewater discharge permit. The permit is issued pursuant to the State Pollution Discharge Elimination System (SPDES) which allows the WTP to discharge flow from backwash lagoons into the West Canada Creek adjacent to the WTP property. The lagoons treat backwash water from the WTP process to allow settling of solids and decanting of the clear water supernatant. MVWA agreed to the issuance of a Consent Order by NYSDEC in 2016 related to a plant upset in 2014. Currently, the SPDES permit is under review by the NYSDEC under its Environmental Benefits Permits Strategy (EBPS) program. It is anticipated that a new permit will be issued in the near term with some modifications to the current permit conditions.

### *State Environmental Quality Review Act*

Actions of the MVWA involving certain projects are subject to the State Environmental Quality Review Act (“SEQR”), codified at Article 8 of the State Environmental Conservation Law. All MVWA projects are screened for SEQR applicability. If a project is subject to SEQR, an Environmental Assessment Form is prepared and reviewed by the MVWA. When it is the SEQR lead agency for a project, the MVWA makes a Determination of Significance under SEQR after identifying the relevant areas of environmental concern, thoroughly analyzing each environmental concern and providing a reasoned elaboration supporting its determination. If there exists the potential for at least one significant adverse environmental impact, the MVWA issues a positive declaration under SEQR and prepares a draft environmental impact statement for public review and comment. Upon completion of a Final Environmental Impact Statement, the MVWA publishes its SEQR Findings which (i) consider the relevant environmental impacts, facts, and conclusions disclosed in the final environmental impact Statement, (ii) weighs and balances relevant environmental impacts with social, economic, and other considerations, (iii) provides a rationale for the MVWA’s decision, (iv) certifies that the requirements of SEQR have been met and (v) certifies that consistent with social, economic, and other essential considerations from among the reasonable alternatives available, the project is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that any adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating conditions to the decision those mitigating measures that were identified as practicable.

When designated a SEQR Involved Agency for a project, the MVWA coordinates SEQR with the lead agency and other involved agencies and, if a project has been the subject of a final environmental impact statement, publishes its own SEQR findings.

Many of the actions undertaken by the MVWA fall under the Type II category and are not subject to review under SEQR.

### *Bulk Storage*

The MVWA has above and below grade bulk petroleum and chemical tanks that are subject to EPA/NYSDEC Regulations. All of the MVWA’s tanks in service are in compliance; tanks no longer in service have been removed or closed in compliance with NYSDEC standards. A 2019 NYSDEC inspection of the bulk fuel oil tank revealed one minor issue which was immediately corrected. A 5-year update of the MVWA bulk storage plan is currently underway.

### *Dam Safety*

As part of a continued upgrade of dam oversight, the NYSDEC issued revisions to Part 673 Dam Safety Regulations, dated August 19, 2009. These regulations require more dam inspections, regular maintenance, and better record keeping and planning for emergencies. The MVWA is complying with the current requirements.

The regulations require owners to demonstrate that their dams are being properly maintained and that they meet modern safety standards. They also include specific responsibilities for a dam owner to ensure ongoing safety, such as record-keeping requirements, inspections and maintenance (I&M) plans, scheduled inspections by a professional engineer who works for the dam's owner, scheduled safety assessments to confirm that a dam meets modern safety criteria, Emergency Action Plans (EAPs) to assist first responders (which the MVWA currently has), and annual certification that documents that the I&M Plans and EAPs are in effect and up-to-date.

Recent NYSDEC Dam Safety inspections reportedly found minimal issues to resolve such as vegetative cover removal and burrowing-rodent control which are being addressed by the MVWA. A boom mower and tractor are used for maintenance of the embankments. The MVWA is pursuing the decommissioning and breaching of both the Marcy Reservoir and Southern Reservoir #5 and several engineering assessments are underway or being planned.

### **Reporting of Other Post-Employment Benefits**

The MVWA provides postemployment health insurance coverage to its retired employees and their survivors in accordance with the provisions of the employment contract negotiated between the Board and its employee groups. Substantially all employees may become eligible for these benefits if they reach normal retirement age while working for the MVWA.

A small group of retirees and their survivors are afforded health insurance as a supplement to Medicare for life. All other retirees and their survivors are provided a number of years of health insurance premium payments based on their years of service to the MVWA. MVWA pays 100% of the cost of premiums to insurance companies that provide the health care coverage. Healthcare benefits for non-bargaining employees are similar to those of union employees.

The MVWA currently pays for postemployment health care benefits on a pay-as-you-go basis. Premiums paid by the MVWA on behalf of current retirees and their spouses totaled \$460,155 and \$422,065 for the years ended December 31, 2021 and 2020, respectively.

The total liability for "other post-employment benefits" or "OPEB" for the MVWA's years ended December 31, 2021 and 2020 were measured as of September 30, 2021 and September 30, 2020, respectively, using an actuarial valuation as of that date. MVWA's total OPEB liability as of December 31, 2021 was \$5,257,452 and as of December 31, 2020 was \$5,043,138.

The MVWA recognized OPEB expense of \$674,500 and \$510,000 for the years ended December 31, 2021 and 2020, respectively.

For more information regarding the MVWA's OPEB liabilities, see Note 9 to the MVWA's audited financial statements for the fiscal year ending December 31, 2021 attached hereto as Appendix F.

## FINANCIAL OPERATIONS

### Current Water Rates

The MVWA’s rates effective January 1, 2023 for both residential and non-residential users that are billed on a quarterly basis for water consumption are shown below:

<u>Amount</u>	<u>Charge per 1,000 cubic feet</u>
First 900 cu. ft.	\$39.27
Next 5,100 cu. ft.	\$38.48
Next 64,000 cu. ft.	\$38.09
Thereafter	\$25.91

The consumption charge for the first 900 cu. ft. of \$39.27 also serves as the minimum quarterly charge for water use. There is a quarterly fixed charge (the “Base System Fee”) of \$36.00 for customers using a 5/8" meter; the fixed charge increases with increasing meter size. The total minimum quarterly charge to a customer is the sum of the minimum water use charge and the fixed charge; for a user with a 5/8" meter, it is \$75.27.

Meters are read and billed quarterly, except for larger commercial accounts, which are read and billed monthly.

### History of Rate Increases

The MVWA sets its rates annually in concurrence with the adoption of its annual operating and capital budget. The MVWA is required by the Financing Agreement to set rates and fees sufficient to cover all of its operating costs and 115% of the principal and interest on debt service used for construction and remediation of the system. The MVWA has raised its rates as necessary to meet its obligations. The average annual increase in rates from Fiscal Year 2011 through Fiscal Year 2023 is 2.52%. A summary of the recent percentage increases in the MVWA’s rates is set forth below:

<u>Effective Date</u>	<u>January 1, 2019</u>	<u>January 1, 2020</u>	<u>January 1, 2021</u>	<u>January 1, 2022</u>	<u>January 1, 2023</u>
Consumption Charges and System Charges	2.00%	2.50%	2.00%	2.50%	4.85%

### Billing and Collection

All but a limited number of water customers are billed quarterly. The remaining customers, generally large users, are billed monthly. The MVWA bills customers for the water services it provides and also bills the City sewer charges and Oneida County sewer charges. The MVWA also prepares and issues bills on behalf of the Towns of Marcy and Westmoreland and the Villages of Oriskany, Yorkville and Holland Patent. The MVWA also collects payments for both water services and sewer services. Amounts collected for sewer services are paid to the respective jurisdiction, as appropriate. In the event that a customer makes a partial payment, it is the policy of the MVWA to satisfy the outstanding water charges first before allocating funds to the sewer charges. The forecasted cash flows reflect the expected continuation of this method of applying payments.

The MVWA also prepares and issues water bills to Strawberry Hills manufactured home development and the Village of Bridgewater water system outside of the MVWA’s service area. The MVWA collects and remits payments to these water service providers on a monthly basis.

On an annual basis, the municipalities identified above, Strawberry Hills and the Village of Bridgewater are expected to pay the MVWA for billing and collection services in the amount of \$290,000. Such payments by the municipalities, Strawberry Hills and the Village of Bridgewater represent negotiated amounts which may be subject to adjustment in the future.

The forecasted cash flows anticipate that the MVWA will continue to bill and collect for sewer services on behalf of the City, the County, and other municipalities and be paid by each party during the years ending December 31, 2022 through December 31, 2027.

The MVWA collects a high percentage of its billings. The following table shows the recent experience for billings and collections.

**FINANCIAL INFORMATION**  
**Billings/Receipts**  
**Historical Collection Rates**

<b>Fiscal Year Ending</b>	<b>Metered Water Sales</b>	<b>Delinquency Charges</b>	<b>Fees and Ancillary Charges</b>	<b>Other Services</b>	<b>Total Billing<sup>(1)</sup></b>	<b>Total Receipts<sup>(2)</sup></b>	<b>Percentage</b>
2017	\$21,037,430	\$783,505	\$366,828	\$340,985	\$22,528,748	\$22,606,573	100.35%
2018	22,107,823	854,416	365,491	367,398	23,695,128	23,908,748	100.90
2019	22,263,890	829,291	608,408	347,390	24,048,979	23,931,212	99.51
2020	22,551,272	148,198	608,429	336,043	23,643,942	23,335,958	98.70
2021	23,093,327	733,731	541,161	353,513	24,721,732	25,002,905	101.14

<sup>(1)</sup> Total Billing is consistent with amounts listed in the MVWA’s audited financial statements.

<sup>(2)</sup> Total Receipts is consistent with the MVWA’s monthly cash flow statements.

**Debt and Debt Service Coverage**

The MVWA has made capital improvements to the Regional System in each year using the proceeds of Bonds and cash generated from annual revenues. As shown below, the year-end value of the MVWA’s net utility plant and principal amount of outstanding Bonds remained relatively stable over the period of 2017 through 2021.

	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Net Utility Plant, At Cost	\$86,355,153	\$86,011,829	\$85,666,586	\$87,822,509	\$89,195,617
Principal of Outstanding Bonds	\$57,098,720	\$53,143,820	\$49,028,820	\$60,378,820	\$57,140,794

Source: Annual Audited Financial Statements of the MVWA and Finance Authority

The following table summarizes revenues, expenses, debt service and debt service coverage for the most recent fiscal years of operation of the MVWA.

## HISTORICAL DEBT SERVICE COVERAGE

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
<b><u>REVENUES</u></b>					
Operating Revenue	\$22,528,748	\$23,695,128	\$24,048,979	\$23,643,942	\$24,721,732
Non-Operating Revenue	<u>847,681</u>	<u>621,399</u>	<u>735,326</u>	<u>636,054</u>	<u>655,486</u>
Total Revenues	<u>\$23,376,429</u>	<u>\$24,316,527</u>	<u>\$24,784,305</u>	<u>\$24,279,996</u>	<u>\$25,377,218</u>
<b><u>EXPENSES</u></b>					
Operating Expenses less depreciation, amortization, bad debts and expenses paid from bond proceeds	\$14,337,276	\$13,205,628	\$14,472,868	\$15,530,490	\$14,680,252
Non-Operating Expenses	<u>65,285</u>	<u>55,208</u>	<u>38,452</u>	<u>42,697</u>	<u>32,626</u>
Total Expenses	<u>\$14,402,561</u>	<u>\$13,260,836</u>	<u>\$14,511,320</u>	<u>\$15,573,187</u>	<u>\$14,712,878</u>
Net Revenue, before PILOTs and Promissory Note (A)	\$8,973,868	\$11,055,691	\$10,272,985	\$8,706,809	\$10,664,340
Debt Service (B)	\$5,994,445	\$5,931,557	\$6,066,722	\$5,543,972	\$6,193,442
Debt Service Coverage before PILOTs and Promissory Note (A/B) <sup>(1)</sup>	1.50	1.86	1.69	1.57	1.72
Debt Service Coverage Requirement	1.15	1.15	1.15	1.15	1.15
PILOTs <sup>(2)</sup>	\$1,378,711	\$1,318,424	\$1,275,610	\$1,233,220	\$1,204,078
Promissory Note, Net <sup>(2)</sup>	<u>480,713</u>	<u>480,714</u>	<u>480,725</u>	<u>440,665</u>	<u>480,715</u>
Total (C)	<u>\$1,859,424</u>	<u>\$1,799,138</u>	<u>\$1,756,335</u>	<u>\$1,673,885</u>	<u>\$1,684,793</u>
Debt Service Coverage after giving effect to PILOTs and Promissory Note (A-C/B) <sup>(1)</sup>	1.19	1.56	1.40	1.27	1.45

<sup>(1)</sup> The above debt service coverage calculation excludes cash amounts carried forward from prior years which are permissible under MVWA's financing agreement for purposes of satisfying the debt service coverage requirement.

<sup>(2)</sup> PILOTs and Promissory Note Payments are subordinate to the debt service payments of the MVWA.

### Insurance

The MVWA has covenanted in the Financing Agreement that, so long as any Bonds are outstanding, it will insure or cause to be insured any at or above ground structures of the Regional System against loss by fire and such other risks as are generally included in extended coverage insurance. The policies shall be issued by responsible insurance companies in such reasonable amounts as are usually carried for like properties and as may be recommended by the Consulting Engineer or an independent insurance consultant retained by the MVWA. The MVWA further covenants in the Financing Agreement that it will maintain public liability, including bodily injury and property damage insurance, with responsible companies in such amounts as may be recommended by the Consulting Engineer or an independent insurance consultant retained by the MVWA.

## **COMPARATIVE ANNUAL WATER CHARGES**

The following table presents a comparison of the water charges of the MVWA during Fiscal Year 2023 with those of other water systems. The comparable rates are as follows:

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**MOHAWK VALLEY WATER AUTHORITY**  
**Comparative Annual Water User Charges**

<u>Single Family Residential</u>		<u>Commercial</u>		<u>Industrial</u>	
<u>City</u>	<u>Annual Charge</u>	<u>City</u>	<u>Annual Charge</u>	<u>City</u>	<u>Annual Charge</u>
1 Troy	\$189	1 Schenectady	\$2,577	1 Schenectady	\$257,700
2 Albany	206	2 Troy	3,632	2 Rochester	273,745
3 Syracuse	225	3 Watertown	3,762	3 Buffalo	288,254
4 Watertown	256	4 Albany	3,957	4 Columbus	332,149
5 Schenectady	258	5 Buffalo	4,100	5 <b>MVWA</b>	<b>342,549</b>
6 Binghamton	292	6 Rochester	4,302	6 Syracuse	350,442
7 New York	299	7 Syracuse	4,332	7 Troy	363,200
8 Yonkers	314	8 Binghamton	4,540	8 Watertown	369,850
9 Rochester	320	9 Allentown	5,073	9 Binghamton	441,754
10 Cleveland	332	10 Cleveland	5,092	10 Allentown	459,134
11 Columbus	338	11 Columbus	5,209	11 Philadelphia	492,984
12 Poughkeepsie	350	12 <b>MVWA</b>	<b>5,604</b>	12 Cleveland	498,123
13 Buffalo	408	13 New York	5,749	13 Baltimore	523,848
14 Philadelphia	410	14 Yonkers	6,030	14 New York	574,866
15 Newburgh	410	15 Philadelphia	6,363	15 Yonkers	602,942
16 <b>MVWA</b>	<b>417</b>	16 Poughkeepsie	6,531	16 Poughkeepsie	649,931
17 Allentown	495	17 Baltimore	6,642	17 Newburgh	788,000
18 Baltimore	513	18 Newburgh	7,880	18 Albany	863,636
19 New Rochelle	676	19 New Rochelle	10,469	19 New Rochelle	1,020,240
20 Pittsburgh	922	20 Pittsburgh	14,015	20 Pittsburgh	1,165,388
Average	\$381		\$5,793		\$532,937

Note: User Charges are based upon information provided by the identified cities in December 2022 and standardized assumptions regarding water consumption and other factors. Actual charges in each city will vary in accordance with local usage patterns. Charges for the MVWA Service Area reflect rates in effect for Fiscal Year 2022, ending December 31, 2022.

Source: Amawalk Consulting Group LLC

The Rate Consultant has concluded that the rates to be charged by the MVWA are reasonable in comparison to other water utilities and are particularly competitive for large customers.

### **CONCLUSIONS OF CONSULTING ENGINEER**

The Consulting Engineer has prepared the Engineering Report that is included in this Official Statement as Appendix A. The conclusions of the Consulting Engineer, as stated in the Engineering Report, are as follows:

The Consulting Engineer has rated the Regional System facilities “sufficient”.<sup>(1)</sup> The Consulting Engineer is also of the opinion that:

- The Regional System has an abundant supply of source water from the Hinckley Reservoir. The Water Supply Permit issued by the NYSDEC authorizes a quantity of water to be withdrawn from Hinckley Reservoir that is sufficient to meet current and future water supply needs of the Regional System.
- The Regional System’s intake, treatment, storage, distribution, and transmission facilities are sufficient to meet the Regional System’s demands that are the subject of this report and as projected through the year 2027 including residential, commercial and industrial growth, as well as anticipated expansion of the Regional System.
- Water produced is consistently in compliance with Federal and State regulations, including the qualitative requirements of the National Interim Primary Drinking Water Regulations and the Secondary Drinking Water Regulations.
- The MVWA is in compliance with all of its environmental permits, and the Consulting Engineer does not foresee noncompliance based on its evaluation of the Regional System and implementation of the CIP as contemplated.
- The CIP is sufficient to maintain Regional System operability and support growth.
- The expected life of the Regional System, assuming full implementation of the CIP and provisions of adequate operation and maintenance practices, should exceed fifty (50) years.
- The population within the existing service area has been relatively constant over the past 10 years and is anticipated to trend toward slight growth (<1.0%) over the next 5 years. A multi-year leak detection program is underway, which should further aid in the reduction of unaccounted water loss. The MVWA has reduced unaccounted for water loss by approximately 1.5 to 2 MGD in the past several years as a result of this program thereby improving system reliability and efficiency, and restoring availability of capacity to supply to customers.
- In December 2018, Jacobs Engineering Group, Inc. completed the Water System Capacity Expansion Plan – Preliminary Program Management Plan (Jacobs Report). MVWA retained Jacobs to update the preliminary Program Management Plan drafted in 2013. The executive

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<sup>(1)</sup> A “sufficient” rating is the highest possible rating given by the Consulting Engineer. It is defined in the Engineering Report to mean that the subject facilities have the capabilities of meeting current and future demands for the next five years.



summary of this report is located in Appendix A to the Engineering Report attached to this Official Statement as Appendix A.

- The distribution and transmission systems within MVWA regional water system continue to age and will need to be either cleaned, repair, rehabilitated and/or replaced in the future. MVWA has also recognized this and is anticipating these needs in the CIP for the next 15 years. Necessary long-term improvements to the systems are presented in Jacobs Report.
- The Water Treatment Plant is operated by Veolia (formerly known as: Suez – North America). Suez and MVWA entered into a five (5) year contract for Suez to take over daily operations and maintenance. Operation of the plant under Suez has been sufficient.
- The MVWA Rules and Regulations were most recently updated on January 1, 2019. The Rules and Regulations includes general requirement, definitions, standard details, and rates and fees. The MVWA is currently working to update the Rules and Regulations; a revised set is planned for release in late 2022. Details for water service connections and curb boxes are located in Appendix B to the Engineering Report attached to this Official Statement as Appendix A.
- The MVWA’s staff is sufficiently trained, and equipped to ensure that the operation and maintenance requirements of the water system are met. This is evident through expanded health and safety training programs, as well as the continued successful installation of replacement water mains, purchase of major engineering equipment, and evaluation of the system cyber security.
- The MVWA staff possesses qualifications and experience sufficient to operate and maintain the Regional System and to implement the proposed CIP.

## **PROJECTED FINANCIAL RESULTS**

### **Projected Revenues, Expenses and Coverage**

Amawalk Consulting Group LLC, as the Rate Consultant, has prepared a Report in connection with the issuance of the Series 2023 Bonds. The Report of the Rate Consultant, which presents the Rate Consultant’s independent analysis of the forecasted cash flows of the Finance Authority for Fiscal Years 2022 through 2027, is attached to this Official Statement as Appendix B. The following table from the Report summarizes forecasted cash flows for the Regional System for fiscal years 2022 through 2027.

With the exception of carryforward revenues, debt service and debt service coverage, the forecasted cash flows in the following table for Fiscal Years 2022 and 2023 reflect approved budgets of the MVWA for those years and do not reflect later estimates or projections of actual results for Fiscal Year 2022 or any results for Fiscal Year 2023 to date. Actual results for Fiscal Years 2022 and 2023 will vary from such budgets.

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**MOHAWK VALLEY WATER AUTHORITY**  
**Forecasted Cash Flow (\$)**

Line No.		12/31 FY					
		2022	2023	2024	2025	2026	2027
1	Operating Revenue						
2	User Charge Revenue	\$24,079,000	\$25,656,078	\$26,632,643	\$27,911,288	\$29,528,985	\$31,125,078
3	Other Revenues						
4	Miscellaneous Fees and Charges	1,151,000	1,519,886	1,519,886	1,519,886	1,519,886	1,519,886
5	Interest Earnings on Operating Funds	15,000	12,000	21,765	20,401	18,244	17,953
6	Interest Earnings on Trust Funds	96,855	352,397	138,471	128,904	128,526	129,388
7	Billing and Collection Fees	293,000	290,000	290,000	290,000	290,000	290,000
8	Laboratory Fees and Grants	92,000	128,983	125,000	125,000	125,000	125,000
9	Hydroelectric Power Revenue	55,000	95,000	95,000	95,000	95,000	95,000
10	Current Revenues	25,781,855	28,054,344	28,822,764	30,090,480	31,705,641	33,302,305
11	Carryforward Revenues	10,743,722	9,536,632	8,705,863	8,160,584	7,297,709	7,181,199
12	Total System Revenues	36,525,577	37,590,976	37,528,627	38,251,064	39,003,350	40,483,504
13	Operation and Maintenance Expenses						
14	Personnel Services	8,574,970	8,628,326	8,973,459	9,332,397	9,705,693	10,093,921
15	Other Than Personnel Services	7,206,911	8,158,497	8,484,837	8,824,230	9,177,200	9,544,288
16	Total O&M Expenses (excluding PILOT)	15,781,881	16,786,823	17,458,296	18,156,628	18,882,893	19,638,209
17	Payments in Lieu of Taxes	1,317,311	1,325,645	1,325,645	1,325,645	1,332,806	1,452,600
18	Debt Service of the Finance Authority						
19	Outstanding Bonds*	6,518,384	6,526,033	6,512,887	6,515,400	6,519,770	6,513,546
20	Series 2023 Bonds*	-	227,792	390,500	541,625	543,625	545,125
21	Anticipated Future Bonds	-	-	-	752,343	752,343	1,385,895
22	Total Debt Service	6,518,384	6,753,825	6,903,387	7,809,368	7,815,738	8,444,566
23	Promissory Note Payment	480,715	480,715	480,715	480,715	480,715	480,715
24	Cash-Financed Construction & Equipment	2,025,654	2,248,106	1,700,000	1,700,000	1,700,000	1,700,000
25	Infrastructure Maintenance Deposits	540,000	1,290,000	1,300,000	1,231,000	1,310,000	1,310,000
26	Rate Study Deposits - O&M, 3R Reserves	325,000	-	200,000	250,000	300,000	300,000
27	Total Revenue Requirements	26,988,945	28,885,114	29,368,042	30,953,355	31,822,151	33,326,089
28	Net Carryforward line 12-line 27	\$9,536,632	\$8,705,863	\$8,160,584	\$7,297,709	\$7,181,199	\$7,157,414
29	Debt Service Coverage Before Subordinated PILOT and Promissory Note Payments (line 12 - line 16)/line 22	3.18	3.08	2.91	2.57	2.57	2.47
30	Debt Service Coverage (line 12 - line 16 - line 17 - line 23)/line 22	2.91	2.81	2.65	2.34	2.34	2.24
31	<b>Projected Increases in User Rates</b>	<b>2.5%</b>	<b>4.85%</b>	<b>4.90%</b>	<b>5.90%</b>	<b>6.90%</b>	<b>6.50%</b>

Notes:

\* Debt service on Outstanding Bonds and Series 2023 Bonds is preliminary, subject to change.

1. Figures in this table reflect the 12-month fiscal years ending December 31st.

2. The increase in user rates for 2022 and 2023 reflects the adopted rates of the Board.

3. The above debt service coverage calculation include cash amounts carried forward from prior years which are permissible under MVWA's financing agreement for purposes of satisfying the debt service coverage requirement.

The above forecast is premised upon certain assumptions set forth in the Report of the Rate Consultant, including the following:

1. The MVWA approves future increases in rates which will provide revenue as projected in the Report.
2. Water consumption by customers will continue to decline over the long-term at a modest annual rate.
3. All contracts and agreements of the MVWA, the Finance Authority and, where appropriate, the City which have been relied upon in preparing the Report are fully enforceable in accordance with their terms and conditions.
4. There will be no significant changes in Federal or State law which would materially adversely impact the MVWA or the Finance Authority's operations.

### **CONCLUSIONS OF THE RATE CONSULTANT**

Based upon the analysis contained in the Report of the Rate Consultant attached to this Official Statement as Appendix B, the Rate Consultant has expressed the opinion that Revenues (including projected revenue increases resulting from anticipated future rate increases to be implemented by the MVWA), as set forth in the forecasted cash flows, are currently and will be sufficient to meet the following requirements during the Reporting Period (FY 2022 through FY 2027):

1. One hundred percent (100%) of all expenses of operation, maintenance, and repair of the Regional System;
2. One hundred and fifteen percent (115%) of the principal of and interest on all bonds issued under the Resolution, as the same shall become due and payable;
3. One hundred percent (100%) of the required annual payments to the City under the Promissory Note; and
4. One hundred percent (100%) of other Required Deposits as required by the Resolution.

See the Report of the Rate Consultant attached to this Official Statement as Appendix B for assumptions and information used in the Report.

For purposes of the preceding Rate Covenant, Revenues shall include money of the MVWA or the Finance Authority, except money transferred from the Construction Fund that is unexpended proceeds of Indebtedness, held in the Bond Redemption and Accumulated Surplus Fund which the Trustee has been irrevocably instructed to apply to the payment of Operating Expenses or Debt Service Requirements within the Fiscal Year for which credit is given.

### **INVESTMENT POLICY**

The Finance Authority and the MVWA have adopted investment guidelines. These guidelines provide that monies held under a trust indenture or similar instrument governing an issue of the Finance Authority's bonds, notes or other obligations (including the Series 2023 Bonds) shall be invested only in the permitted investments specified in such trust indenture or instrument. The investment guidelines of the Finance Authority and the MVWA also provide that monies of the MVWA or Finance Authority not held

under a trust indenture or similar instrument governing an issue of the Finance Authority's bonds, notes or other obligations shall be deposited in interest-bearing accounts in a bank or banks in the State and, while on deposit, shall be secured by obligations of the United States or the State of a market value equal at all times to the amount on deposit. The investment guidelines further provide that any such monies of the MVWA or Authority not required for immediate use or disbursement may be invested in those obligations specified pursuant to the provisions of Section 98-a of the State Finance Law.

## **TAX MATTERS**

### **Series 2023 Bonds**

In the opinion of Bond Counsel, under current law, and subject to the conditions hereinafter described, interest on the Series 2023 Bonds is not includable in gross income of the owners of the Series 2023 Bonds for federal income tax purposes. Interest on the Series 2023 Bonds, however, will be includable in the gross income of the owners thereof retroactive to the date of issue of the Series 2023 Bonds in the event of a failure by the Finance Authority or the MVWA to comply with applicable requirements of the Internal Revenue Code of 1986, as amended (the "Code"), and their respective covenants regarding the use, expenditure, and investment of the proceeds of the Series 2023 Bonds and the timely payment of certain investment earnings to the United States Treasury. No opinion is rendered by Bond Counsel as to the effect on the exclusion from gross income of the interest on the Series 2023 Bonds for federal income tax purposes of any action taken or not taken without the approval of Bond Counsel or upon the advice or approval of counsel other than Bond Counsel.

Interest on the Series 2023 Bonds is not an item of tax preference for purposes of the federal alternative minimum tax on individuals under the Code.

In the opinion of Norton Rose Fulbright US LLP, Bond Counsel, interest on the Series 2023 Bonds is exempt from personal income taxes imposed by the State or any political subdivision thereof including The City of New York.

### **Original Issue Discount**

The excess, if any, of the amount payable at maturity of any maturity of the Series 2023 Bonds purchased as part of the initial public offering over the issue price thereof constitutes original issue discount. The amount of original issue discount that has accrued and is properly allocable to an owner of any maturity of the Series 2023 Bonds with original issue discount (a "Discount Bond") will be excluded from gross income for federal income tax purposes to the same extent as interest on the Series 2023 Bonds. In general, the issue price of a maturity of the Series 2023 Bonds is the first price at which a substantial amount of Series 2023 Bonds of that maturity was sold (excluding sales to bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents, or wholesalers), which may differ from the price for that maturity shown on the inside cover page of this Official Statement, and the amount of original issue discount accrues in accordance with a constant yield method based on the compounding of interest. A purchaser's adjusted basis in a Discount Bond is to be increased by the amount of such accruing discount for purposes of determining taxable gain or loss on the sale or other disposition of such Discount Bonds for federal income tax purposes.

Original issue discount that accrues in each year to an owner of a Discount Bond is included in the calculation of the distribution requirements of certain regulated investment companies and may result in some of the collateral federal income tax consequences discussed herein. Consequently, an owner of a Discount Bond should be aware that the accrual of original issue discount in each year may result in

additional distribution requirements or other collateral federal income tax consequences although the owner of such Discount Bond has not received cash attributable to such original issue discount in such year.

The accrual of original issue discount and its effect on the redemption, sale, or other disposition of a Discount Bond that is not purchased in the initial offering at the first price at which a substantial amount of the maturity of the Series 2023 Bonds of which the Discount Bond is a part is sold to the public may be determined according to rules that differ from those described above. An owner of a Discount Bond should consult his or her tax advisors with respect to the determination for federal income tax purposes of the amount of original issue discount with respect to such Discount Bond and with respect to state and local tax consequences of owning and disposing of such Discount Bond.

### **Bond Premium**

The excess, if any, of the tax basis of Series 2023 Bonds purchased as part of the initial public offering to a purchaser (other than a purchaser who holds such Series 2023 Bonds as inventory, stock in trade, or for sale to customers in the ordinary course of business) over the amount payable at maturity is “Bond Premium.” Bond Premium is amortized over the term of such Series 2023 Bonds for federal income tax purposes (or, in the case of a bond with bond premium callable prior to its stated maturity, the amortization period and yield may be required to be determined on the basis of an earlier call date that results in the lowest yield on such bond). No deduction is allowed for such amortization of Bond Premium; however, Bond Premium is treated as an offset to the interest received on the Series 2023 Bonds. An owner of such Series 2023 Bonds is required to decrease his adjusted basis in such Series 2023 Bonds by the amount of amortizable Bond Premium attributable to each taxable year such Series 2023 Bonds are held. An owner of such Series 2023 Bonds should consult his or her tax advisors with respect to the precise determination for federal income tax purposes of the treatment of Bond Premium upon sale, redemption or other disposition of such Series 2023 Bonds and with respect to state and local income tax consequences of owning and disposing of such Series 2023 Bonds.

### **Backup Withholding**

Interest paid on the Series 2023 Bonds is subject to information reporting in a manner similar to interest paid on taxable obligations. While this reporting requirement does not by itself, affect the excludability of interest on the Series 2023 Bonds from gross income for federal income tax purposes, the reporting requirement causes the payment of interest on the Series 2023 Bonds to be subject to backup withholding if such interest is paid to beneficial owners who (i) are not “exempt recipients,” and (ii) either fail to provide certain identifying information (such as the beneficial owner’s taxpayer identification number) in the required manner or have been identified by the Internal Revenue Service as having failed to report all interest and dividends required to be shown on their income tax returns. Generally, individuals are not exempt recipients, whereas corporations and certain other entities generally are exempt recipients. Amounts withheld under the backup withholding rules from a payment to a beneficial owner would be allowed as a refund or a credit against such beneficial owner’s federal income tax liability provided the required information is furnished to the Internal Revenue Service.

### **Other Tax Consequences**

The Code contains other provisions (some of which are noted below) that could result in tax consequences, upon which Bond Counsel expresses no opinion, as a result of the ownership of the Series 2023 Bonds or the inclusion of interest on the Series 2023 Bonds in certain computations that include interest that is otherwise excluded from gross income for purposes of federal income taxation.

PROSPECTIVE PURCHASERS OF THE SERIES 2023 BONDS SHOULD CONSULT THEIR TAX ADVISORS AS TO THE APPLICABILITY AND IMPACT OF ANY SUCH COLLATERAL TAX CONSEQUENCES.

Ownership of tax-exempt obligations may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, financial institutions, property and casualty insurance companies, certain foreign corporations doing business in the United States, certain S Corporations with excess passive income, individual recipients of Social Security or Railroad Retirement benefits, taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry tax-exempt obligations, taxpayers who may be eligible for the earned income tax credit, and corporations subject to the alternative minimum tax on adjusted financial statement income.

### **Future Tax Developments**

Future or pending legislative proposals, if enacted, regulations, rulings or court decisions may cause interest on the Series 2023 Bonds to be subject, directly or indirectly, to federal income taxation or to state or local income taxation, or may otherwise prevent beneficial owners from realizing the full current benefit of the tax status of such interest. Legislation or regulatory actions and future or pending proposals may also affect the economic value of the federal or state tax exemption or the market value of the Series 2023 Bonds. Prospective purchasers of the Series 2023 Bonds should consult their tax advisors regarding any future, pending or proposed federal or state tax legislation, regulations, rulings or litigation, as to which Bond Counsel expresses no opinion.

### **COVENANT BY THE STATE**

Under the Act, the State pledges and agrees with the holders of any Bonds issued by the Finance Authority and with those persons or public corporations who may enter into contracts with the Finance Authority pursuant to the Act that the State will not alter, limit or impair the rights vested in the Finance Authority to fulfill the terms of any contracts or agreements made with or for the benefit of holders of the Bonds or to in any way impair the rights and remedies of the holders of the Series 2023 Bonds until such Bonds, together with interest thereon, including any unpaid installments of interest and all costs and expenses in connection with any action or proceeding by or on behalf of the holders thereof, are fully met and discharged and such contracts are fully performed on the part of the Finance Authority. The State further covenants with the purchasers and all subsequent holders and transferees of the Series 2023 Bonds issued by the Finance Authority that the Series 2023 Bonds of the Finance Authority issued pursuant to the Act and the income therefrom and all revenues, monies, and property pledged to secure the payment of the Series 2023 Bonds shall at all times be free from taxation, except for transfer and estate taxes.

### **LITIGATION**

There is not now any pending or, to the best of the Finance Authority's knowledge, any threatened litigation restraining or enjoining, or seeking to restrain or enjoin, the issuance or delivery of the Series 2023 Bonds or questioning or affecting the validity of the Series 2023 Bonds or the proceedings and authority under which they are to be issued, nor is the creation, organization, or existence of the Finance Authority being contested. Nor, except as described below, is there any litigation pending or, to the best of the Finance Authority's knowledge, threatened which in any manner questions the right of the MVWA to operate the Regional System or the MVWA's right to conduct its activities in accordance with the provisions of the Act and of the Resolution. Any other litigation pending is, except as described below, of a routine nature which does not affect the right of the MVWA to conduct its business or affect the validity of its obligations.

## LEGAL MATTERS

Norton Rose Fulbright US LLP, New York, New York, Bond Counsel to the Finance Authority, will render its approving opinion as to the validity and legality of the Series 2023 Bonds, copies of which will be available at the time of delivery of the Series 2023 Bonds and the form of which is annexed hereto in Appendix C. Certain legal matters will be passed upon for the Finance Authority by its counsel, Calli Calli & Cully, Utica, New York. Certain legal matters will be passed upon for the Underwriter by Orrick, Herrington & Sutcliffe LLP, New York, New York.

## ENVIRONMENTAL COMPLIANCE

Hancock & Estabrook, LLP, Syracuse, New York, has served as special counsel to the MVWA with respect to matters relating to SEQR. As a condition to the issuance of the Series 2023 Bonds, Hancock & Estabrook, LLP will render an opinion that the MVWA has complied in all respects with SEQR with respect to the projects to be funded with the proceeds of the Series 2023 Bonds.

## RATINGS

Moody's Investors Service ("Moody's") and S&P Global Ratings ("S&P") have assigned the Series 2023 Bonds ratings of "\_\_\_" and "\_\_\_," respectively. Such ratings reflect only the view of Moody's and S&P, with respect to the ratings given by them, and any explanation of the significance of such ratings may only be obtained from such rating agencies. There is no assurance that the ratings will remain in effect for any given period of time or that they will not be lowered, suspended or withdrawn entirely if, in the judgment of Moody's and/or S&P, circumstances so warrant. Any such lowering, suspension or withdrawal of the ratings might have an adverse effect on the market price or marketability of the Series 2023 Bonds.

## GREEN BONDS

The Finance Authority is self-designating the Series 2023 Bonds as "Green Bonds" as the proceeds will be used exclusively for projects and activities that further the MVWA's mission of providing safe drinking water to users within its service area, specifically by increasing the resiliency of the Regional System by the implementation of the 2023 Project. The proceeds will be used to further the MVWA's ability to comply with the provision of the SDWA and the State Sanitary Code. The SDWA established National Interim Primary Drinking Water Regulations, which cover contaminants that have adverse effects on human health. The regulations are under the jurisdiction of the EPA. The SDWA also developed Secondary Drinking Water Regulations that cover contaminants that adversely affect the aesthetic quality of drinking water, such as taste, odor and appearance. The NYSDOH has been granted authority by the EPA to monitor and enforce all Federal and State regulations.

### *Series 2023 Bonds*

The 2023 Project to be financed with the proceeds of the Series 2023 Bonds includes additional funds for the Phase II portion of a new, 3-mile raw water transmission line that will carry water from the source at Hinckley Reservoir to the WTP in Prospect, New York. Phase II will include the construction of approximately 5,000 linear feet of transmission line. The new transmission line will replace a 24-inch diameter line constructed in 1905 with a 54-inch diameter line that will be able to convey larger volumes of water with less pressure loss. The result of this multiphase project will be a major improvement in the MVWA's ability to draw sufficient supplies from Hinckley Reservoir during times of significant drought that would result in below-normal water levels within the reservoir.

The construction of a new raw water transmission line of larger diameter is considered to be a water system sustainability project since the increased system resiliency will make the public water supply significantly more drought resistant and provide greater operational continuity in the face of uncertain climate patterns.

The larger pipe diameter will also enable the two hydro-electric power turbines located within the WTP piping system to run on a more continuous basis as pressure losses are reduced with the build-out of the new raw transmission line.

Design of Phase II of this new transmission line is nearly complete. It is expected to be bid and awarded during the summer of 2023 and completed by the end of the 2023 calendar year.

For additional information on Phase II of the new raw water transmission line, see “THE REGIONAL SYSTEM – Water Supply and Demand Analysis – *Transmission and Distribution Mains.*”

The remaining proceeds of the Series 2023 Bonds will be used to complete a variety of small capital improvement and replacement projects that will improve system resiliency and reliability, and safeguard public health by improving water quality and maintaining compliance with tightening Federal and State drinking water regulations.

#### *The Series 2023 Bond Proceeds*

In conjunction with the Green Bond designation of the Series 2023 Bonds, the MVWA will track the net proceeds of the Series 2023 Bonds and will confirm that such proceeds were used for green purposes as set forth herein. The net proceeds of the Series 2023 Bonds will be deposited in the 2023 Project Account of the Construction Fund. Moneys in the 2023 Project Account of the Construction Fund will be used only for the 2023 Project. Pending such disbursement, the net proceeds will be invested pursuant to the MVWA’s investment policy. See “INVESTMENT POLICY”.

#### *Annual Reporting*

The Finance Authority will provide disclosure to demonstrate the environmental benefits resulting from the planned expenditures of the Series 2023 Bonds. Construction and final use of the proceeds is expected to be completed within twelve months after receipts of funds. The disclosure will take the form of an annual report to be incorporated into the MVWA’s annual continuing disclosure filings described below under “CONTINUING DISCLOSURE” (although the agreement to provide this disclosure is not incorporated into the Finance Authority’s Continuing Disclosure Certificate, defined below).

Ongoing disclosure will indicate in detail how the proceeds were expended, the contractors performing the work and receiving payments, and the actual work that was completed.

Annual reporting will also include updates on the following key metrics:

1. A schematic diagram that may be modified from time to time indicating hydraulic improvements to the raw water transmission. This report will graphically depict how much water can be conveyed to the WTP at various levels of water elevation within Hinckley Reservoir.
2. The total amount of purified potable water conveyed from Hinckley Reservoir during the operating year.



3. The levels of THM present at various sampling points in the water distribution system as measured during periodic sample periods throughout the year.

4. The total amount of hydro-electric power produced by the turbines within the WTP piping as measured in kilowatt hours produced annually.

The reporting on the Green Bond initiative as described above is voluntary disclosure being undertaken by the Finance Authority and such voluntary disclosure is not incorporated into the Finance Authority's Continuing Disclosure Certificate.

#### **CONTINUING DISCLOSURE UNDER SEC RULE 15c2-12**

The Finance Authority, as an "obligated person" within the meaning of Section (b)(5)(i) of Securities and Exchange Commission (the "SEC") Rule 15c2-12 under the Securities Exchange Act of 1934, as amended (17 CFR Part 240, § 240.15c2-12) (the "Rule"), has undertaken in the Continuing Disclosure Certificate to provide certain information. A copy of the form of Continuing Disclosure Certificate for the Series 2023 Bonds (the "Continuing Disclosure Certificate") is contained in Appendix G herein.

The Finance Authority's continuing disclosure obligations are presently defined by several earlier continuing disclosure certificates provided in connection with prior borrowings. These prior certificates generally remain in effect only so long as the respective prior borrowing remains outstanding. The Rule requires the Finance Authority to disclose its record of compliance with its prior undertakings during the previous five years, as such record may be relevant to an evaluation of the likelihood of future compliance with the terms of the Continuing Disclosure Certificate. The following table sets forth the dates annual filings were made for each of the five preceding fiscal years.

<u>Fiscal Year Ending December 31:</u>	<u>Financial and Operating Information</u>	<u>Audited Financial Statements</u>
2017	5/28/2018	5/9/2018
2018	6/3/2019	6/3/2019
2019	6/22/2020	5/19/2020
2020	5/17/2021	5/5/2021
2021	6/1/2022	5/3/2022

Prior continuing disclosure certificates had indicated that the Finance Authority would include in such filings historical annual information and operating data of the type contained under the headings or subheadings "CAPITAL IMPROVEMENT PROGRAM," "COMPARATIVE ANNUAL WATER CHARGES" and "PROJECTED FINANCIAL RESULTS" in the corresponding official statement prepared in connection with the borrowing. Such information, however, was not included in such filings. The Finance Authority routinely updates its capital improvement plans and, although the Finance Authority has not determined that such plans constitute "material historical annual information and operating data," intends to annually update and provide information of the type under the "CAPITAL IMPROVEMENT PROGRAM" heading. The Finance Authority has determined, however, that information under headings or subheadings "COMPARATIVE ANNUAL WATER CHARGES" and "PROJECTED FINANCIAL RESULTS" referred to in prior continuing disclosure certificates need not be included in annual filings because it is not "material historical annual information and operating data" about the Finance Authority and the Regional System, as it consists only of plans or projections of the Finance Authority or information

about other water authorities or water systems. The Finance Authority has also determined that information under the subheadings “THE REGIONAL SYSTEM – Leakage and Non-Revenue Water Use” and “FINANCIAL OPERATIONS – Current Water Rates” need not be included in annual filings because it is not “material historical annual information and operating data” about the Finance Authority and the Regional System, as it consists only of plans or projections of the Finance Authority or other non-material information. The Finance Authority, moreover, has not included such headings in the Continuing Disclosure Certificate.

### **FINANCIAL ADVISOR**

Capital Markets Advisors, LLC, Great Neck, New York is serving as Financial Advisor to the MVWA with respect to the issuance of the Series 2023 Bonds. The Financial Advisor will not engage in any underwriting activities with regard to the issuance and sale of the Series 2023 Bonds. The Financial Advisor is not obligated to undertake and has not undertaken to make an independent verification or to assume responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement and is not obligated to ensure compliance with the undertaking by the MVWA to provide continuing secondary market disclosure.

### **UNDERWRITING**

The Underwriter of the Series 2023 Bonds (listed on the cover page hereof), has agreed, subject to certain conditions, to purchase the Series 2023 Bonds from the Finance Authority at a price of \$ \_\_\_\_\_, which reflects original issue [premium/discount] of \$ \_\_\_\_\_ and an Underwriter’s discount of \$ \_\_\_\_\_. The Series 2023 Bonds are being purchased for reoffering by the Underwriter. The initial public offering prices for the Series 2023 Bonds are set forth on the inside cover page of this Official Statement. The Series 2023 Bonds may be offered and sold to certain dealers (including dealers depositing such Series 2023 Bonds into unit investment trusts) at prices lower than the initial public offering prices. The initial public offering prices may be changed from time to time by the Underwriter.

### **LEGALITY FOR INVESTMENT**

The Act provides that bonds and notes issued by the Finance Authority (including the Series 2023 Bonds) are securities in which all public officials and bodies of the State and all municipalities, all insurance companies and associations and other persons carrying on an insurance business, all banks, bankers, trust companies, savings banks and savings associations, including savings and loan associations, building and loan associations, investment companies and other persons carrying on a banking business and administrators, guardians, executors, trustees and other fiduciaries, and all other persons whatsoever who are now or may hereafter be authorized to invest the bonds or other obligations of the State, may properly invest their funds including capital in their control or belonging to them.

The bonds and notes issued by the Finance Authority are also, by the Act, made securities which may be deposited with and may be received by all public officers and bodies of the State and all municipalities for any purpose for which the deposit of bonds or other obligations of the State is now or may hereafter be authorized.

### **CERTIFICATION AS TO OFFICIAL STATEMENT**

For certain portions of this Official Statement, the Finance Authority has relied upon the detailed studies, assumptions and conclusions set forth in the Engineering Report of Barton & Loguidice, D.P.C., as Consulting Engineer, and in the Report prepared by Amawalk Consulting Group LLC, as Rate Consultant.

The Appendices are hereby incorporated as integral parts of this Official Statement. The Engineering Report of the Consulting Engineer, included as Appendix A, is included in this Official Statement in reliance upon the expertise of such firm as a consultant knowledgeable with respect to the design and operation of water systems or facilities. The Report of the Rate Consultant included as Appendix B to this Official Statement has been prepared by the Rate Consultant, and is included herein and relies on the expertise of that firm in preparing financial forecasts. The information contained in Appendix D has been obtained from sources which the Finance Authority believes to be reliable.

The references herein to the Act, the General Resolution, the Fourteenth Supplemental Resolution and the Series 2023 Bonds are made subject respectively to all of the provisions thereof, to which reference is hereby made for further information. The references thereto in this Official Statement do not purport to be complete statements thereof. The agreement of the Finance Authority with the holders of the Series 2023 Bonds are fully set forth in the Resolution, and neither any advertisement of such Series 2023 Bonds nor this Official Statement are to be construed as a contract with the purchasers of such Series 2023 Bonds.

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So far as any statements are made in the Official Statement involving matters of opinion or estimate, whether or not expressly so stated, they are intended merely as such and not as presentations of fact. Copies of the documents mentioned in this paragraph are on file at the offices of the Finance Authority and of the Trustee.

UPPER MOHAWK VALLEY REGIONAL  
WATER FINANCE AUTHORITY

By: \_\_\_\_\_  
Chairperson

Dated: \_\_\_\_\_, 2023

**Engineering Report of the Consulting Engineer**

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*Engineering Report*

**Engineering Report Regarding  
Regional Water Financing  
Water System Revenue Bonds  
Series 2023**

Prepared for  
**Upper Mohawk Valley Regional Water Finance  
Authority & Mohawk Valley Water Authority**

Oneida and Herkimer Counties  
New York



Revision 0  
February 2023

**Barton & Loguidice**





Upper Mohawk Valley Regional Water Finance Authority  
& Mohawk Valley Water Authority  
Oneida and Herkimer Counties, New York

Engineering Report  
Regarding Regional Water Financing  
Water System Revenue Bonds Series 2023

February 2023

Prepared for  
Upper Mohawk Valley Regional Water Finance Authority &  
Mohawk Valley Water Authority

Prepared by  
Barton & Loguidice, D.P.C.  
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**ABBREVIATIONS**

ADD	Average Daily Demand
BMP	Best Management Practice
C	Celsius
CCI	Construction Cost Index (ENR)
cfs	Cubic feet per second
CT	concentration x time
DEC	New York State Department of Environmental Conservation
DMR	Discharge Monitoring Report
DO	Dissolved Oxygen
DOT	New York State Department of Transportation
DWSRF	Drinking Water State Revolving Fund
ECL	Environmental Conservation Law
EDU	Equivalent Dwelling Unit
EFC	New York State Environmental Facilities Corporation
ENR	Engineering News-Record
EPA	United States Environmental Protection Agency
F	Fahrenheit
fps	Feet per second
gpd	Gallons per day
GML	General Municipal Law
gpm	Gallons per minute
HGL	Hydraulic Grade Line
hp	Horsepower
HPGN	High Precision Geodetic Network (1998)
IUP	Intended Use Plan
ISO	Insurance Services Office
LF	linear feet
MHI	Median Household Income
MGD	Million gallons per day
NAD83	North American Datum (1983)
NAVD88	North American Vertical Datum (1988)
NPSHa	Net positive suction head available
NPSHr	Net positive suction head required
NYS CC	New York State Canal Corporation
NYS DOH	New York State Department of Health
NYSOPRHP	New York State Office of Parks, Recreation, and Historic Preservation

**ABBREVIATIONS (cont'd)**

OCHD	Oneida County Health Department
OIN	Oneida Indian Nation
OMB	Office of Management and Budget
PAC	Powdered activated carbon
PACl	Polyaluminum chloride
PER	Preliminary Engineering Report
PHF	Peak Hourly Flow
ppm	parts per million
psig	Pounds per square inch (gauge)
Q	Volumetric flow rate (gpm, MGD)
scfm	Standard cubic feet per minute (68 degrees F and 1 atmosphere)
SEQR	State Environmental Quality Review
SPDES	State Pollutant Discharge Elimination System
SWPPP	Storm Water Pollution Prevention Plan
TDH	Total dynamic head
THM	Trihalomethane
TSS	Total suspended solids
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service





## 1.0 EXECUTIVE SUMMARY

### 1.1. Overview

#### 1.1.1. Overview of the Regional System

The Mohawk Valley Water Authority (MVWA) owns and operates a water supply, treatment, transmission, and distribution system (Regional System) that serves a population of approximately 126,250 people, as of December 2022, in the eastern portion of Oneida County, New York (County), including parts in the Towns of Trenton, Marcy, Deerfield, Whitestown, New Hartford, Kirkland, and Westmoreland, the City of Utica (City), six (6) villages, as well as portions of the Towns of Frankfort and Schuyler in Herkimer County. Principal water system components include the water intake at Hinckley Reservoir, a water filtration treatment plant, pump stations, water storage facilities, approximately 700 miles of water transmission and distribution mains, and related appurtenances. MVWA has the right under a New York State Department of Environmental Conservation (NYSDEC) Water Supply Permit (WSP) issued June 1, 2014, to withdraw up to 32.0 million gallons per day (MGD) of water from the Hinckley Reservoir (owned by the State of New York). The MVWA has contractual rights with the NYS Canal Corp. to withdrawal up to 48.5 MGD. MVWA withdraws approximately 18.7 MGD on average with Peak day reaching 21.9 MGD.

#### 1.1.2. Creation of the Authority and the Mohawk Valley Water Authority

The Upper Mohawk Valley Regional Water Board (Board) and the Upper Mohawk Valley Regional Water Finance Authority (Finance Authority) were created in 1994 by an act of the New York State Legislature (Sections 1200-1339 of the Public Authorities Law, hereinafter the Act). Under the Act, the Board may acquire, own, and operate the Regional System and charge water system user fees for the services provided by the Board. The Finance Authority may provide financing through the issuance of bonds, notes, or other instruments to enable the Board to exercise its functions.

The Board acquired and began operating the Regional Water System in December of 1996. In 2003, the Board filed a DBA with New York State to operate under the name of the Mohawk Valley Water Authority. For clarity, and consistency herein, we will continue to refer to this entity as the MVWA throughout this report.

#### 1.1.3. Capital Improvements Program

The MVWA's Capital Projects Committee, in conjunction with the Principal Engineer, develops a Capital Improvement Program (CIP) regularly. The projects in the CIP are funded with a combination of operating revenue and bond funds. Over \$86 million of CIP projects have been implemented since 1998.

The MVWA plans to issue Water System Revenue Bonds in 2023 to finance WTP and distribution system improvement projects detailed in the CIP. **The total amount to be**

**financed by the bonds is \$9,150,000.** The list below defines the anticipated expenditure of the bond funds for improvement of identified components of the Regional System. The listed improvements will support MVWA's continued focus on improving the Regional System's reliability and compliance with USEPA's water quality regulations.

- FY 2023 CIP Projects – \$4,690,000 – By Facility Type:
  - Treatment Facilities - \$390,000
  - Pump Stations - \$0
  - Open Reservoirs - \$0
  - Storage Tanks - \$300,000
  - Metering Stations - \$50,000
  - Regulating Stations - \$0
  - Transmission and Distribution Mains - \$3,950,000
  - Other Facilities - \$0
- FY 2024 CIP Projects – \$4,460,000 – By Facility Type:
  - Treatment Facilities - \$100,000
  - Pump Stations - \$100,000
  - Open Reservoirs - \$40,000
  - Storage Tanks - \$435,000
  - Metering Stations - \$0
  - Regulating Stations - \$515,000
  - Transmission and Distribution Mains - \$3,200,000
  - Other Facilities - \$70,000

#### 1.1.4. Regional Systems Operations

The daily operations of the water system are performed by a full complement of management, technical, financial, and system maintenance personnel. The water transmission and distribution system is operated and maintained by MVWA employees. The MVWA entered into a 5-year agreement with Suez-North America (subsequently acquired by Veolia) on August 1, 2017, for maintenance and operation of the Water Treatment Plant. This agreement was renewed in December 2022 for another 5-year term.

The MVWA Water Quality Laboratory is EPA recognized. In addition to completing water quality sampling and analysis for the Regional System, MVWA regularly provides microbiological testing services, watershed assessments, and related services to numerous other water system purveyors on a fee-for-service basis. Marketing of this service to others is also anticipated to be a growth area of USEPA's evolving drinking water regulations.

The MVWA continues to explore opportunities to provide water service to communities that are not presently part of the Regional System. Extension of the Regional System to

five (5) Mohawk Valley municipalities including the Villages of Ilion, Frankfort, and Herkimer, and the Towns of Schuylers and Herkimer is currently in the design phase. While inter-municipal agreements between MVWA and these communities have not yet been executed, proposed extension of the Regional System will potentially result in an increased demand and sale of up to 1.60 MGD of water to the Village of Ilion, Town of Schuylers, and Town of Herkimer. Connections to the Villages of Herkimer and Frankfort are expected to initially be made for backup purposes only. However, capacity is available for MVWA to become the primary water supplier to those two villages should they determine it in their interest in the future.

## 1.2. Purpose and Scope

The focus of this report will be to provide an assessment of the Regional System's operations, facilities, future capital expenditures, and operating and maintenance requirements.

References with respect to financial and capital improvements aspects of this report were provided by staff from the MVWA.

The report is divided into the following sections:

- **Organizational Structure** – provides an overview of the Authority and the MVWA organizational structure and inter-relationship.
- **Regional System Description and Evaluation** – provides a synopsis of the present Regional System and facilities, as well as information related to daily operation and maintenance.
- **Capital Improvement Program (CIP)** – provides an outline of the capital expenditures required to maintain and upgrade the Regional System beyond that covered by normal maintenance expenditures. Included in the CIP Program are types of facilities, proposed improvements, and related cost projections.
- **Regulatory Status** – describes the regulatory framework governing the Regional System and the Regional System's compliance with those regulations.

This report also includes a professional opinion as to the sufficiency of the Regional System in terms of current conditions, operations, and capital funding needs (see paragraph 1.4).

## 1.3. Report Methodology

This report was prepared by Barton & Loguidice, D.P.C. (Consulting Engineer). The Consulting Engineer has provided professional services to the MVWA, and municipalities served by the Regional System.

Regional System information, administrative and financial data was obtained from previous reports, current studies, and communications with key MVWA staff.

After completing the assessment, the Regional System facilities were rated as one of the following three (3) categories:

- **Sufficient (Highest Possible Rating)** – The facilities have the capabilities of meeting current and future demands for the next five (5) years.
- **Limited** – The facilities are functional and meet current demands; however, they require significant maintenance and capital improvements.
- **Insufficient** – The facilities are currently functionally deficient in meeting existing demands.

To the extent possible, all of the data was reviewed and assessed to verify its accuracy. Conclusions represented throughout this report represent the Consulting Engineer’s technical opinions based upon the reviews, field inspection, involvement with professional design services, interviews, and subsequent analysis of data received and projected in accordance with the accepted engineering practice. The Consulting Engineer visited and inspected many of the Regional System Facilities, and has been involved with the study, design, and construction projects for the MVWA.

#### **1.4. Background of Consulting Engineer and Opinion of the Consulting Engineer**

Barton & Loguidice, D.P.C., was founded in 1961 as a consulting engineering firm offering civil and environmental engineering services. The firm currently has approximately 350 engineers, planners, environmental scientists, landscape architects, and other technical staff providing services for a wide variety of multidisciplinary projects across New York State and throughout the Northeastern United States. Since its founding, the Consulting Engineer has provided water resource development and water supply system engineering services.

The Consulting Engineer has rated the Regional Systems facilities SUFFICIENT. The Consulting Engineer is also of the opinion that:

- The Regional System has an abundant supply of source water from the Hinckley Reservoir. The Water Supply Permit issued by the NYSDEC authorizes a quantity of water to be withdrawn from the Hinckley Reservoir that is sufficient to meet current and future water supply needs of the Regional System.
- The Regional System’s intake, treatment, storage, distribution, and transmission facilities are sufficient to meet the Regional System’s demands that are the subject of this report and as projected through the year 2027 including residential, commercial, and industrial growth, as well as anticipated expansion of the Regional System.
- Water produced is consistently in compliance with Federal and New York State regulations, including the qualitative requirements of the Nation Interim Primary Drinking Water Regulations and the Secondary Drinking Water Regulations.
- The Authority is in compliance with all of its environmental permits, and the Consulting Engineer does not foresee noncompliance based on its evaluation of the Regional System and implementation of the CIP as contemplated.

- The CIP is sufficient to maintain Regional System operability and support growth.
- The expected life of the Regional System, assuming full implementation of the CIP and provisions of adequate operation and maintenance practices, should exceed fifty (50) years.
- The population within the existing service area has been relatively constant over the past 10 years and is anticipated to trend toward slight growth (<1.0%) over the next 5-years. A multi-year leak detection program is underway, which should further aid in the reduction of unaccounted water loss. The MVWA has reduced unaccounted for water loss by approximately 1.5 to 2 MGD in the past several years as a result of this program thereby improving system reliability and efficiency, and restoring availability of capacity to supply to customers.
- In December 2018, Jacobs Engineering Group, Inc. completed the Water System Capacity Expansion Plan – Preliminary Program Management Plan (Jacobs Report). MVWA retained Jacobs to update the preliminary Program Management Plan drafted in 2013. The executive summary of this report is located in Appendix A.
- The distribution and transmission systems within MVWA regional water system continue to age and will need to be either cleaned, repaired, rehabilitated and/or replaced in the future. MVWA has also recognized this and is anticipating these needs in the CIP for the next 15 years. Necessary long-term improvements to the systems are presented in Jacobs Report.
- The Water Treatment Plant is operated by Veolia (Formerly known as: Suez – North America). Suez and MVWA entered into a five (5) year contract for Suez to take over daily operations and maintenance. Operation of the plant under Suez has been Sufficient.
- The MVWA Rules and Regulations were most recently updated on January 1, 2019. The Rules and Regulations include general requirements, definitions, standard details, and rates and fees. The MVWA is currently working to update the Rules and Regulations; a revised set is planned for release in late 2022. Details for water service connections and curb boxes are located in Appendix B.
- The MVWA’s staff is sufficiently trained, and equipped to ensure that the operation and maintenance requirements of the water system are met. This is evident through expanded health and safety training programs, as well as the continued successful installation of replacement water mains, purchase of major engineering equipment, and evaluation of the system cyber security.
- The MVWA staff possesses qualifications and experience sufficient to operate and maintain the Regional System and to implement the proposed CIP.

## 2.0 ORGANIZATIONAL STRUCTURE

### 2.1. Purpose of Finance Authority and Mohawk Valley Water Authority

The Upper Mohawk Valley Regional Water Finance Authority (Finance Authority) and the Upper Mohawk Valley Regional Water Board (the latter now known as the Mohawk Valley Water Authority, or “MVWA”) were created in 1994 by an act of the New York State Legislature (Sections 1200-1399 of the Public Authorities Law. Hereinafter the “Act”). Under the Act, MVWA may acquire, own, and operate the Regional System and charge water system user fees for the services provided by the MVWA. The Finance Authority may provide financing through the issuance of bonds, notes, or other instruments to enable the MVWA to exercise its functions.

### 2.2. Water Finance Authority

The governing body of the Finance Authority consists of five (5) members, two (2) of which must be City residents and two (2) of whom must be residents of the Towns outside the City. The fifth position alternates between a City resident and a non-City resident and is currently vacant. The current members of the Authority are:

- Vincent J. Gilroy, Jr., Chairman, appointed by the City of Utica Common Council. His term expires on December 31, 2024.
- Mitch Ford, Treasurer, appointed by the Towns of New Hartford and Whitestown. His term expires on December 31, 2024 (the current appointment is by the Town of New Hartford).
- Eric Linder, appointed by the Oneida County Executive. His term expires on December 31, 2023.
- Thomas J. Nelson, appointed by the Mayor of Utica. His term expires on December 31, 2024.
- VACANT SEAT

### 2.3. Mohawk Valley Water Authority

The Mohawk Valley Water Authority (MVWA) is governed by twelve (12) members, evenly divided between residents of the City and residents of the Towns outside the City. The members of the MVWA are:

- Elis J. DeLia, Esq., Chairman, appointed by the Town of New Hartford. His term will expire on December 31, 2025. (Capital Projects Committee Chair)
- Bruce Brodsky, Vice Chairman, appointed by the Oneida County Board of Legislators with the consent of the City of Utica Common Council. His term will expire on December 31, 2023. This position requires City residency. (Audit Committee Chair)
- Rocco Arcuri, Treasurer, appointed by the Mayor of Utica. His term will expire on December 31, 2025. (Budget and Finance Committee Chair)
- Dennis Bova, appointed by the Oneida County Board of Legislators upon the recommendation from the City of Utica Common Council. His term will expire December 31, 2023. This position requires City residency.

- Bette Szesny, appointed by the Oneida County Executive subject to confirmation by the Herkimer County Legislature. Her term expired on December 31, 2021, but she continues to serve until reappointed or replaced.
- Vincent J. Coyne, appointed by the Town of Whitestown. His term will expire on December 31, 2023. (Governance Committee Chair)
- Mark Ford, appointed by the Utica Common Council. His term will expire on December 31, 2025. (Personnel Committee Chair)
- Carl Annese, appointed by the Towns of Marcy, Schuyler, and Kirkland. His term will expire on December 31, 2024 (the current appointment is by the Town of Marcy)
- Richard Karam, appointed by the Utica Common Council. His term will expire on December 31, 2024.
- Frank Mutolo, appointed by the Mayor of Utica. His term expired on December 31, 2021, but he continues to serve until reappointed or replaced. (Operations Committee Chair)
- George Haskell, appointed by the Town of Deerfield. His term will expire on December 31, 2025.
- VACANT SEAT.

## 2.4. Regional System Operations

### 2.4.1. Operations

The MVWA initiated a Strategic Planning process to evaluate current operations and identify long and short-term goals and actions items needed to accomplish those goals. The MVWA revisits the Strategic Planning Process periodically to assess and evaluate recent progress made and to make appropriate adjustments. The latest Strategic Plan update was finalized in 2012.

The daily operations of the water system are performed by a full complement of management, technical, financial, and system maintenance personnel. Historically daily operations of all of MVWA's assets and facilities was performed by MVWA employees; however, in 2017, the MVWA hired the firm Suez – North America (Now part of Veolia) to operate and maintain the Water Treatment Plant. Operation and maintenance of the water transmission, distribution and storage facilities continues to be performed by MVWA employees.

In August of 2016, a Request for Quotation (RFQ) solicitation was developed to begin the process of selecting a contract operation firm for the Water Treatment Plant. The RFQ was sent out to eight (8) firms in December of 2016. Of the eight (8) RFQ solicitations sent out, four (4) responses were received, and of those four (4) responses, three (3) were selected to provide proposals based on a RFP issued in December 2017. Management reviewed and ranked the proposals for selection. The Board approved the top selection, Suez – North America, in June 2017. On August 1, 2017, the Authority entered into a five (5)-year agreement with Suez to control the operation and

maintenance of the WTP. Of the original seven (7) staff members at the WTP, five (5) were retained by Suez and two (2) retired. The project manager at the WTP is Gary Trapnell.

The MVWA has utilized its own personnel resources to assist neighboring water systems with technical and operational functions on a short-term, fee for service basis. Past examples include providing operator assistance for the Rome, NY water filtration plant and assistance to the Village of Ilion with watershed water quality analyses and management. The scope and fee for this type of assistance is negotiated upon request and as MVWA resources allow.

The MVWA Water Quality Laboratory is EPA “recognized” and regularly provides testing services to other water systems on a fee-for-service basis.

MVWA sent out a request for proposal for a review of its cyber security network and, after evaluating the proposals, selected IBM in December 2017 to provide the cyber security review. IBM completed the evaluation and created a report of findings and recommendations. MVWA is currently implementing IBM’s recommendations as part of a 4-year phased implementation plan at a cost of approximately \$300,000 to \$400,000 annually.

MVWA continues to explore opportunities to provide water service to communities that are not presently part of the Regional System. A proactive approach has been taken by the MVWA to interface with the communities that make up the Regional System with respect to opportunities for system expansion as well as to inform communities and neighborhoods of proposed projects to be undertaken by the MVWA. Recently, the Town of Westmoreland entered into contract with the MVWA for billing and customer service. A similar contract was executed in 2012 with the Town of Bridgewater. These water systems are not part of the Authority’s water system.

The Village of Ilion, located east of MVWA’s service area and which is not currently part of the Regional System, has experienced water supply quantity and quality issues for several years due to a poor water quality source, outdated treatment and distribution systems, and a relatively new groundwater source that contains aesthetically displeasing characteristics (i.e., hardness, iron, manganese, etc.). As a result of these problems, the Village began to explore the potential to secure water supply from MVWA and decommission its own water sources. Part of this initiative has involved coordinating with other municipalities in the region east of MVWA’s current service area to provide water supply as may be needed from MVWA and to share in the cost of constructing the water transmission main. Both the Village of Frankfort and the Village of Herkimer are facing challenges of improving their aged water systems and are in need of significant upgrades and an alternative water source as a back-up to their current sources of



supply. Both of these communities are actively participating in this proposed project for a connection to the MVWA system. It is expected that the Villages of Frankfort and Herkimer will connect to MVWA as a backup supply to their current supplies. However, capacity is available should either or both determine in the future that it is in their interest to purchase water from MVWA as their primary source of supply.

An effort coordinated by the Herkimer County IDA to finance a 24" water transmission main extension from MVWA's system to serve these communities, is underway with construction completion scheduled for late 2024. The project, formally known as the Eastern Mohawk Valley Regional Transmission Main (DWSRF #18563), is expected to cost approximately \$24,000,000. The project cost will be partially financed with grants provided by New York State, with the remainder of cost spread over a user base of approximately 7,458 service connections and a population of approximately 22,000 people between the five municipalities.

In addition to the transmission main project, many improvements are needed to the existing 3 village distribution systems to best utilize the new water source. Each Village is currently either in design or construction of their own water capital improvement projects. Likewise, the towns of Schuyler and Herkimer have created new water districts, along the proposed regional transmission main that will eventually construct new distribution systems to serve these new users.

In total, there could be as many as 6 capital improvement projects between the five communities, including the regional transmission main project, distribution system improvement projects in the villages of Ilion (DWSRF #18563 & 18364), Frankfort (DWSRF #18715), and Herkimer (DWSRF #18860 & 18872), and new distribution system projects in the towns of Schuyler (DWSRF #18711) and Herkimer (DWSRF #18716). It is anticipated that MVWA will assume ownership of the new regional transmission main and the two new Town distribution systems. Ownership and operation of the improved village distribution systems will remain with the respective municipalities for now. The Villages have coordinated their required upgrades with MVWA to ensure that operational takeover is an option in the future. The projected user base and water demand associated with this planned expansion of the Regional Water System is as follows:

**Table 2-1: MVWA Planned Expansion**

<b>Municipality</b>	<b># of Service Connections</b>	<b>Projected Water Demand</b>	<b>MVWA as Primary Supply or Backup Supply</b>
<b>(V) Ilion</b>	3,500	1,100,000	Primary
<b>(V) Herkimer</b>	2,800	1,000,000	Backup
<b>(V) Frankfort</b>	893	600,000	Backup
<b>(T) Schuyler</b>	350	60,000	Primary
<b>(T) Herkimer</b>	65	10,000	Primary

Initially, this project is expected to result in the addition of 3,915 new service connections being serviced by MVWA as their primary source of supply, with a total water demand of about 1.17 MGD. An additional 3,693 service connections would be added with MVWA serving as a backup supply, with demand should MVWA supply be called into service of about 1.6 MGD. The Regional System has the capacity available to meet these water demands.

The table below summarizes MVWA's operating expenses and revenues for the years 2020 and 2021.

**Table 2-2: MVWA Financial Info 2020-2021**

	2020	2021
Metered Water Sales	\$22,600,000	\$23,100,000
Delinquency Charges	*	\$734,000
Other Revenue	*	\$866,000
Total Revenue	\$23,600,000	\$24,700,000
Total Operating Expenses	\$18,500,000	\$17,500,000

Source: MVWA

\*Not Provided

#### 2.4.1.1 Taxes and Pilot Payments

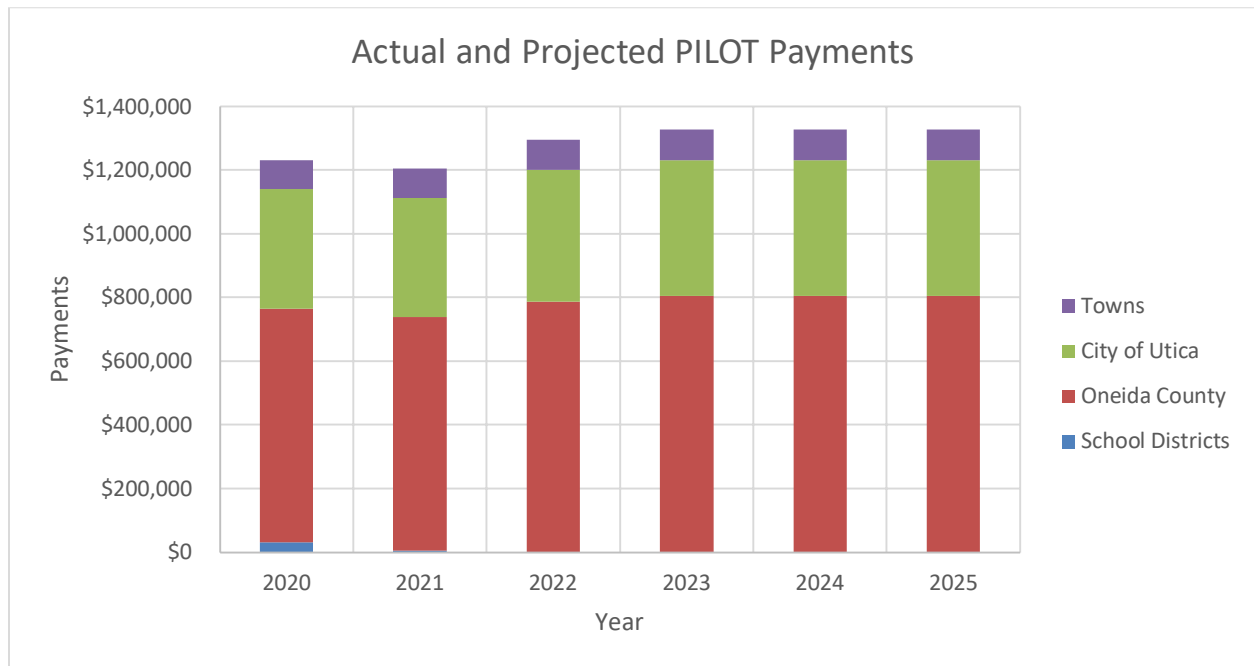
All property owned by the MVWA is exempt from property taxes pursuant to the Act. However, the MVWA is required under the Act to make specified Payments In Lieu Of Taxes (PILOTs) to the City of Utica, Oneida County, impacted school districts (on a declining schedule), and certain communities in Oneida and Herkimer Counties.

The aggregate PILOT payment made by the MVWA in CY 2020 was \$1,229,688. A breakdown of PILOTs payable by the MVWA through CY 2025 are projected as follows:

**Table 2-3: Actual and Projected Pilot Payments**

	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024	CY 2025
<b>School Districts</b>	\$31,795	\$5,301	-	-	-	-
<b>Oneida County</b>	\$732,050	\$732,050	\$786,954	\$805,255	\$805,255	\$805,255
<b>City of Utica</b>	\$375,000	\$375,000	\$412,500	\$425,000	\$425,000	\$425,000
<b>Towns</b>	\$90,843	\$90,843	\$94,250	\$95,385	\$95,385	\$95,385
<b>TOTAL</b>	\$1,229,688	\$1,203,194	\$1,293,704	\$1,325,640	\$1,325,640	\$1,325,640

Source: MVWA



**Figure 2-1: Actual and Projected PILOT Payments**

**2.5. Capital Improvement Program**

A formal five (5) year Capital Improvement Program (CIP) is updated annually. The inaugural CIP was prepared in 1996, the year that the MVWA acquired and began operating the water system. The CIP has been revised, updated, and adopted by the MVWA to reflect projects completed and new projects planned. Over \$86 million of capital and maintenance projects have been undertaken to improve the Regional System since its inception.

The current CIP includes \$9,150,000 in capital projects in FY 2023 and FY 2024 which will be funded through the Series 2023 Bonds. Projects to be funded with Series 2023 Bonds include treatment facility improvements, pump station improvements, reservoir improvements, storage tank improvements, metering & regulating station improvements, transmission and distribution main improvements, and other miscellaneous projects. An additional \$2,590,000 in capital projects in FY 2023 and FY 2024 will be funded utilizing the MVWA’s cash capital reserves.

The 5-Year CIP for FY 2023 – 2027 includes an estimated total of \$28,571,000 of improvements, while the 15-Year CIP for FY 2021 – 2037 calls for Long Range CIP expenditures totaling \$100,341,000. These figures include both bond-funded and cash-funded projects. A detailed breakdown of CIP projects for FY 2023 and FY 2024 and beyond is included in Section 4 of this report.

## 2.6. Organization and Staffing Analysis

The MVWA staffing levels are SUFFICIENT to ensure Regional System operability. The employees of the MVWA have the appropriate backgrounds and experience to operate the Regional System. The recommended personnel positions of the MVWA and the corresponding current staffing figures for each are as noted in Table 2-4. In addition, the MVWA continually performs comprehensive reviews of all staff positions, roles, and responsibilities to determine the best means of allocating staff resources to meet the anticipated operational needs of the water system.

The MVWA staff is managed by the individuals described in the following key positions:

**Table 2-4: MVWA Staffing**

Description	Number of Staff
<b>ADMINISTRATION</b>	
Executive Director	1
Comptroller/ Deputy Comptroller	2
Internal Auditor	1
Personnel Director	1
Customer Service	7
Meter Reading	2
Information Technology	6
Accounting and Billing	3
Administration Support Staff	1
Safety Officer	1
Subtotal	25
<b>SYSTEM ENGINEERING AND MAINTENANCE</b>	
Water System Maintenance	37
Meter Shop	6
Engineering	7
Water Distribution	3
Water Treatment*	0
Lab Operations and System Monitoring	7
Maintenance Support Staff	2
Subtotal	62
<b>TOTAL EMPLOYEES</b>	<b>87</b>

\* These employees work under a contract operations agreement for Suez - NA.

- *Executive Director:* The executive Director is responsible for the management of the Regional System. He also supervises a wide variety of construction, maintenance, operations, engineering, water treatment, and business management activities. This individual reports directly to the Board of Directors.
- *Comptroller:* The Comptroller is responsible for coordination and administration of the MVWA's financial management functions. The Comptroller reports dually to the Board of Directors and the Executive Director.
- *Director of Engineering:* The Director of Engineering is responsible for general planning, permits/compliance, design activities, system extensions and plan approvals, and *development* and implementation of the Capital Improvement Program. The position includes establishing design standards, and the scoping, approval, design, and bidding of capital improvements engineering projects. This individual reports to the Executive Director.
- *Director of Water Quality:* The Director of Water Quality is responsible for coordination and administration of water treatment and purification activities. MVWA contracts Suez-NA for daily operations and maintenance at the water treatment plant that are under the direction and supervision of the Director of Water Quality. The Director of Water Quality is also the Technical Director of MVWA's state-certified water laboratory and is responsible for distribution system water quality and related regulatory compliance programs. The Director of Water Quality reports to the Executive Director.
- *Project Manager, Hinckley Water Filtration Plant:* The Project Manager is responsible for the overall operations, maintenance, and compliance with EPA, NYSDOH, and NYSDEC regulations at the Hinckley Water Treatment Plant.
- *Watershed Coordinator:* The Watershed Coordinator is responsible for managing the watershed master plan and continued development of a watershed-wide and water distribution geographic information system (GIS). This individual reports to the Director of Engineering.
- *Water Maintenance Supervisor:* The Water Maintenance Supervisor plans and supervises the maintenance and extension of activities of the Regional System. This individual reports to the Director of Engineering.
- *Customer Service Coordinator:* The Customer Service Coordinator is responsible for the general management of the office as it relates to all aspects of customer service, including developing a proactive customer relations program. The Customer Service Coordinator reports to the Executive Director.
- *Administrative Officer for Maintenance Facility:* This position is charged with overseeing and managing the maintenance staff assignments, purchase requisitions, and inventory control. This individual reports to the Director of Engineering.
- *Director of Information Systems:* The Director of Information Systems is the Network Administrator and is responsible for the computer hardware and operating software for the MVWA's computer systems, as well as staff computer-related training. This individual reports to the Executive Director.

- *Safety Officer:* Safety Officer is responsible for the development, implementation, and enforcement of a safety program covering employees as well as planning, developing, and conducting safety seminars and training programs. The work is performed in accordance with established policies and procedures including OSHA regulations and maintains records to satisfy OSHA and Toxic substances reporting requirements. The Safety Officer inspects work areas and public facilities to identify and correct conditions which pose a significant risk of accidental injury to employees and general public. The Safety Officer is responsible for assisting in the investigation of accidents on property to determine causes and develop appropriate remedial actions. This individual reports to the Director of Human Resources.
- *Director of Personnel:* The Director of Personnel is responsible for all personnel related functions, including the development and implementation of Personnel Policies and Procedures including health and safety, environmental compliance with Federal, State, and local regulations. This individual also coordinates hiring activities, participates in labor relations functions, and maintains all employment records. The Director of Personnel reports to the Executive Director.
- *Deputy Comptroller:* The Deputy Comptroller is responsible for those duties as may be delegated by the Comptroller, including accounting, billing, and financial management functions. This individual reports to the Comptroller.

## **2.7. Union and Labor Relations**

The MVWA employees are members of one of two unions, with the following exceptions: the Executive Director, Comptroller, Director of Engineering, Research Scientist, Director of Personnel, Personnel Tech, Watershed Coordinator, the Internal Control Analyst, the Executive Secretary, Director of Water Quality, and four (4) other staff members (16 in total). The International Brotherhood of Teamsters, Local Union 294, represents the office staff, operations staff, field labor staff, and foremen. The Management Employees Association represents the remainder of employees.

Contract negotiations with the International Brotherhood of Teamsters Local Union 294 have been completed successfully. A contract settlement was approved by the Teamsters in December 2022. The Board of the MWA is scheduled to vote on the agreement at the monthly meeting to be held on February 6, 2023, where it is expected to pass. The new contract would expire on December 31, 2025.

The Management Employees Association's (MEA) present contract was renewed in Spring 2022 with an expiration date of April 1, 2024.

## **2.8. Headquarters and Maintenance Facilities**

MVWA's Administrative Offices and Water Quality Laboratory are located in the Utica City Hall located at 1 Kennedy Plaza, Utica, NY, where the Authority operates from space leased from the City of Utica. Improvements have recently been completed to upgrade the security of these

offices. Further, MVWA has recently secured housing of a back-up computer server in Syracuse NY for emergency disaster recovery.

MVWA's maintenance crews operate from the Maintenance Facility on Kemble Street in Utica. MVWA has invested in building and site improvements to the facility including security improvements. Further, MVWA continues to lower the average age of its equipment fleet by purchasing new vehicles.

With the purchase of more equipment and vehicles, the Maintenance Department continues to require additional indoor storage space for their fleet, since their only storage facility is the Kemble Street Maintenance Facility. Due to a deficiency of available storage, a portion of the equipment and vehicles are being stored outside and are susceptible to winter conditions, causing operational inconveniences to the staff. With limited storage inside, selected equipment and/or vehicles must endure the winter conditions, placing additional wear and tear on the equipment and vehicles.

The Authority is continuing its efforts to increase storage space for the Maintenance Department. Recent projects at the Kemble St. facility have increased its storage space within the building, but there is no available space on the parcel to build an additional covered storage. Therefore, other Authority's properties including Marcy Reservoir and Southern Reservoir are being evaluated as locations for future covered storage of equipment. The current conceptual design is for a 2,000 to 3,000 square foot structure, constructed as a pole barn or steel truss building.

### 3.0 REGIONAL SYSTEM DESCRIPTION AND EVALUATION

#### 3.1. General Description and History

##### 3.1.1. General Description of Regional System Facilities

The source of water for the Regional System is Hinckley Reservoir, which has a storage capacity of approximately 25 billion gallons. Hinckley Reservoir is located approximately 18 miles north of Utica, was built in 1915, is owned by the State of New York and is operated by the Canal Corporation, a Division of the New York State Power Authority (NYPA). The MVWA is authorized to draw 32 MGD from Hinckley Reservoir pursuant to a NYSDEC Water Supply Permit issued to the MVWA dated June 1, 2014. The reservoir watershed encompasses 373 square miles of largely undeveloped lands, mostly within the Adirondack Park. Hinckley Reservoir also serves as one of the water sources for the Erie Canal System, which is also operated by the Canal Corporation. Water flows into the Regional System through the Hinckley Reservoir Dam intake structure.

The water is conveyed through two (2) parallel raw water transmission mains to the primary Water Treatment Plant (WTP) for the Regional System. The WTP is approximately 16 miles north of the City of Utica and three (3) miles southwest of the Hinckley Reservoir. The treated water is conveyed by gravity from the WTP through two (2) parallel transmission mains to the new Toby Road (two (2) six (6) MG tanks) and Marcy (three (3) MG tank) Water Storage Tanks. From there, it is conveyed to the 10-MG Trenton Road Tank and into the distribution system. The Southern and Deerfield open Reservoirs are now classified as active-standby (i.e., off-line) and will be used only in the event of an emergency.

The distribution system consists of a network of mains, pump stations, and local water storage tanks located throughout the service area. There are secondary water treatment facilities in the Regional System, 20 pump stations, a total of five (5) reservoirs (two (2) active-standby and three (3) inactive) for storing water, 28 storage tanks, 33 master meter stations, and 92 pressure regulating and altitude valve stations.

Approximately 704 miles of water mains for transmission and distribution of water are included within the Regional System. A location map of the major components of the Regional System can be found in Appendix C.

##### 3.1.2. History

The administration of water supply and distribution in the Utica area has undergone numerous changes during the area's history. The first formal organization to manage the water system was the Utica Aqueduct Company, established in 1802 by the New York State Legislature. The company developed a series of springs in what is now downtown West Utica (Spring Street). In 1848, the Utica Water Works Company ("Water Works") developed a well supply on Graffenburg Hill and constructed a



reservoir in what is now Cornhill. This system was supplying 800,000 gallons per day (gal/day) by 1854. The Water Works subsequently constructed the Southern Reservoirs system off Pleasant Street. The Water Works operated the system until 1898. In 1898, the West Canada Water Works Company was formed and purchased the exclusive rights to furnish water to the City. A year later, the two (2) companies were merged to become the Consolidated Water Company (Consolidated). Water Rights to the West Canada Creek were purchased. Consolidated constructed the Deerfield Reservoir in 1900 and in 1906 began supplying water from West Canada Creek through a 17-mile transmission main. Hinckley Reservoir was constructed by the State of New York to supply the Barge Canal System in 1911. The last major open water storage reservoir was constructed in 1915 in Marcy. Consolidated also obtained the rights to 48.5 MGD from the Hinckley Watershed in 1917. Pursuant to a 1937 decision of the Water Power and Control Commission (WPCC), predecessor to the NYSDEC, which authorized the purchase, the City took direct control of the system in 1938 when it purchased Consolidated. In 1941, the City established the Utica Board of Water Supply (UBWS) as a separate entity under City jurisdiction to operate the water system. Major system construction projects under the UBWS included a second 17-mile, 36-inch diameter water transmission main completed in the 1970s and the 32 MGD WTP completed in 1992.

The 1937 decision of the WPCC granted certain rights to towns and villages receiving water service from UBWS. The interpretation of these rights resulted in numerous administrative and legal actions between the City and these towns and villages. Several disputes concerned the setting of water rates for customers inside and outside the City Limits. The formation of the Upper Mohawk Valley Regional Water Board (Board) was undertaken to provide regional participation in the ownership, operation, governance, and financing of the Regional System, and resolved these complex issues. The creation of the Board also ensured a continued supply of sufficient high-quality water to the City and portions of the 16 towns and villages, within the two (2)-county service area.

The UBWS provided water service until 1996, when the Board, now known as the Mohawk Valley Water Authority (MVWA) assumed ownership and operations. The MVWA has since that time completed significant Regional System upgrades and consistently provided quality water service to its customers.

### **3.2. Service Area**

The MVWA's service area is comprised of the City of Utica and all or part of several nearby municipalities. All customers of the Regional System, except for a portion of the Town of Westmoreland and Hamilton College, are served on a retail basis. Metered accounts for all users are read by the MVWA and water payments are made directly to the MVWA. Table 3-1 shows the total number of customers over the last 5 years.

**Table 3-1: Regional System – Number of Metered Accounts**

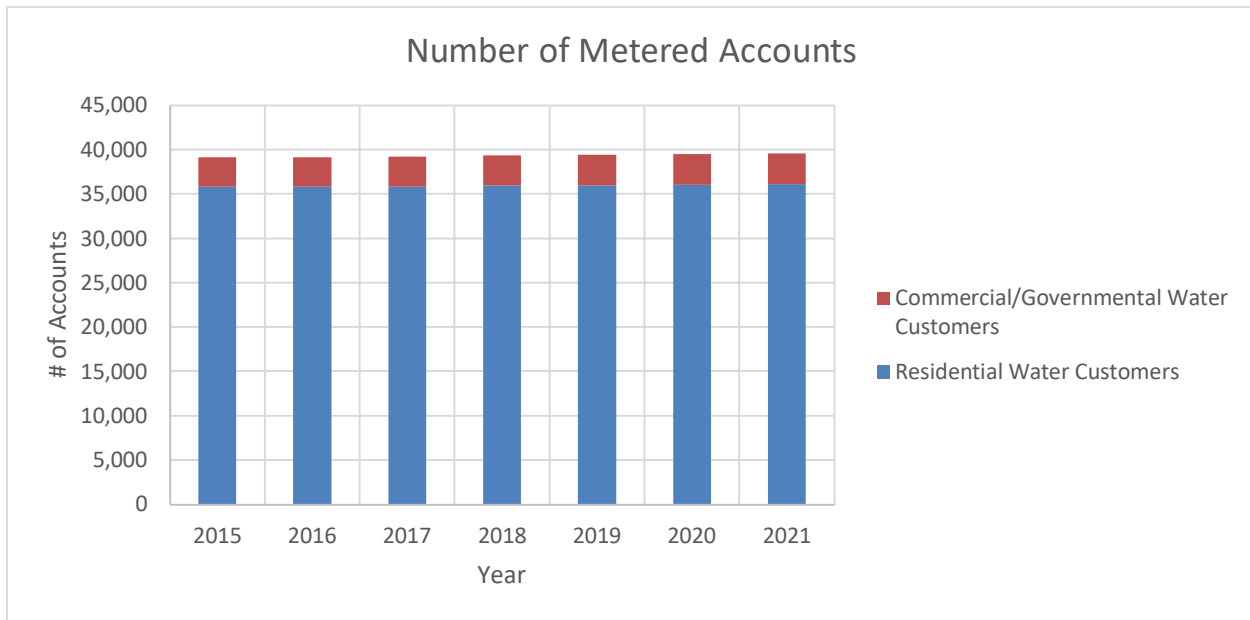
Year Ended	Residential Water Customers	Commercial/Governmental Water Customers	Total Customers
December 31, 2021	36,078	3,498	39,576
December 31, 2020	35,999	3,466	39,465
December 31, 2019	35,951	3,502	39,453
December 31, 2018	35,934	3,431	39,365
December 31, 2017	35,837	3,367	39,204
December 31, 2016	35,836	3,329	39,165
December 31, 2015	35,798	3,314	39,112

Source: MVWA

(1): The billing frequencies for these categories vary based upon historical water usage or type of business. As a result there may be commercial type or governmental customers that are billed on a quarterly basis. Likewise, some residential type customers may be billed on a monthly basis.

(2): Governmental customers consist of villages, towns, and county buildings or other municipal infrastructure.

All accounts pay for water according to the same rate schedule.



**Figure 3-1: Number of Metered Accounts**

**3.3. Water Supply and Demands Analysis**

**3.3.1. Supply**

The source of water for the Regional System is the Hinckley Reservoir. The 25 billion gallon reservoir is a multi-use facility owned by the State of New York. The reservoir is supplied by a 373 square mile watershed primarily (93%) located in the Adirondack Park.

In addition to use by the Regional System, it is used as a supply of water for the New York Power Authority (NYPA) Canal Corporation's Erie Canal, for power generation by the NYPA and Brookfield Power Corp., and for flood control, recreation, and environmental purposes.

The NYSDEC governs the allocation of water resources for public water supplies under Environmental Conservation Law (ECL) through its water supply permit program. The NYSDEC issued a new Water Supply Permit (WSP) No. 9435 in 2014 to the MVWA that authorizes withdrawal of 32 MGD. This permitted withdrawal is based on the existing capacity of the MVWA transmission and treatment systems. Expansion of these systems would allow a new WSP to be issued for up to 48.5 MGD (75 cubic feet per second (cfs)), which is the same amount of water that the UBWS and its predecessors were authorized to withdraw under a 1917 agreement with the State of New York. MVWA's water treatment plant average daily withdrawal was approximately 18.7 MGD in 2022.

In May of 2005, MVWA commenced a legal action against the State of New York (the "State"), the New York State Canal Corporation ("Canal Corporation") and Erie Hydropower, LP ("Erie Hydropower") in New York State Supreme Court for Oneida County. The action sought a judicial declaration the MVWA has the right to use up to 75 cfs of water from the West Canada Creek at Hinckley Reservoir for water supply purposes without providing compensation in the form of money or replacement flows. The action was commenced as a result of contentions made by Canal Corporation and Erie Hydropower in 2004 in opposition to a water supply permit application filed by MVWA with the NYSDEC. Canal Corporation and Erie Hydropower claimed that the MVWA was obligated to pay for all water it withdraws from Hinckley Reservoir unless it provides replacement flows from an upstream compensating reservoir. These claims were based, in part, on a flow compensation provision that had been contained in the 1917 agreement between MVWA and the State, yet never enforced. MVWA sought the declaration that it was entitled to continue to withdraw water from Hinckley Reservoir free from any flow or financial compensation obligation because, among other things, such an obligation had never been enforced in the past, there was no longer any appreciable benefit to the flow compensation provisions contained in the 1917 Agreement, and MVWA's use of the water without flow compensation was not causing any harm.

In 2009, the Trial Court determined as a matter of law that MVWA had no obligation to compensate Erie Hydropower for any water it withdraws from the Hinckley Reservoir. This determination was upheld by the Appellate Court, and the claims between MVWA and Erie Hydropower have been resolved. In 2009, the Trial Court also determined as a matter of law that MVWA was entitled to withdraw up to 35 of the 75 cfs provided for in the 1917 agreement without any obligation to compensate the State/Canal Corporation. MVWA's right to withdraw more than 35 cfs would need to be determined at trial.

MVWA and the State/Canal Corporation thereafter entered into an interim, and then final settlement agreement resolving all claims between them. Among other things, the final settlement agreement dated February 1, 2013 (the "Final Settlement Agreement"), provides that: (1) MVWA has the right to withdraw up to a 75 cfs-day average of water from Hinckley Reservoir without any flow or financial compensation obligation to the State or Canal Corporation; (2) the Hinckley Reservoir will be operated pursuant to a new 2012 Operating Diagram; and (3) the State/Canal Corporation will maintain the Hinckley Reservoir within a normal operating range of 1,195 feet, except during conditions of unusual drought in the Hinckley Watershed.

NYPA operates a hydroelectric facility at the Hinckley Dam and the Brookfield Power Corp. operates a facility downstream at Trenton Falls. Each facility is operated cooperatively under the Federal Regulatory Commission's (FERC) authority. This cooperation is a written component of these FERC licenses to maintain adequate Reservoir water levels. NYPA also has a written protocol for the low flow adjustments. In the past, the then-UBWS implemented an informal procedure to coordinate water withdrawals with Niagara Mohawk Power Corp. (now National Grid), NYPA, and the Canal Corporation to ensure a continuing supply of water for public consumption. The MVWA has incorporated these procedures into their Emergency Response Plan.

### 3.3.2. Demand

The MVWA reports that the difference between the average daily withdrawal from the Hinckley Reservoir and the flow into the WTP is within the tolerance of the large meters, which are calibrated annually.

The WTP has a rated capacity of 32 MGD, which is well in excess of the present Average Day Demand (ADD) and Maximum Day Demand (MDD). The Regional System has substantial treated water storage capacity, about 57.1 million gallons, including the 3-MG Marcy Tank and the two (2) 6-MG Toby Road Tanks. In addition, MVWA maintains 386.8 million gallons in active-standby reserve at Deerfield, and Southern Reservoirs, within the distribution system.

The WTP capacity, coupled with the treated water storage, is able meet the water storage requirements for the next five (5) fiscal years. However, specific limitations in water storage requirements within the distribution system exist. These limitations have been identified by the MVWA in the CIP. Various water tank upgrade projects are included in the proposed CIP that will address these storage limitations.

The highest daily demand ever recorded was on March 20, 1994, when 30.74 MG was used. The MVWA has previously prepared 20- and 50- year demand projections in support of their New York State Department of Conservation Water Supply Permit Application. These projections were 29 MGD and 31 MGD, respectively, for the existing

service area and those areas entitled to West Canada Creek flows under the 1937 Water and Power Commission Decision. A “Report to the Governor by the Hinckley Reservoir Working Group” indicated that the drinking water projection for the year 2050 (i.e., which was a 42-year projection) was some 43 MGD, including expansion into new areas of service and included an allowance of 6 MGD for high-technology silicon chip manufacturer or similar user.

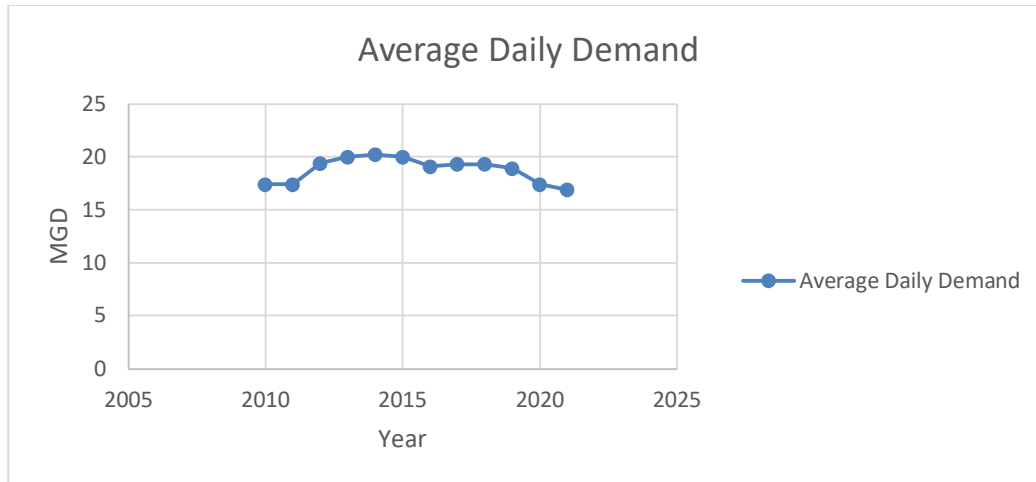
The following table shows the average daily demand (“ADD”) for water consumption within the Regional System in recent periods. This quantity includes what was withdrawn from Hinckley Reservoir for all purposes plus water used for the filter backwashing during water production at the WTP. The increase in total withdrawals beginning in 2012 is attributable to the change to activated carbon in the water filtration process which requires longer and more frequent backwashing cycles.

**Table 3-2: Average Daily Demand**

<b>Fiscal Year</b>	<b>ADD (MGD)</b>
2010	17.4
2011	17.4
2012	19.4
2013	20.0
2014	20.2
2015	20.0
2016	19.1
2017	19.3
2018	19.3
2019	18.9
2020	17.4
2021	16.9

Source: Annual Drinking Water Quality Report for 2021 and MVWA.

Note: ADD is the quantity of raw water withdrawn from Hinckley Reservoir.



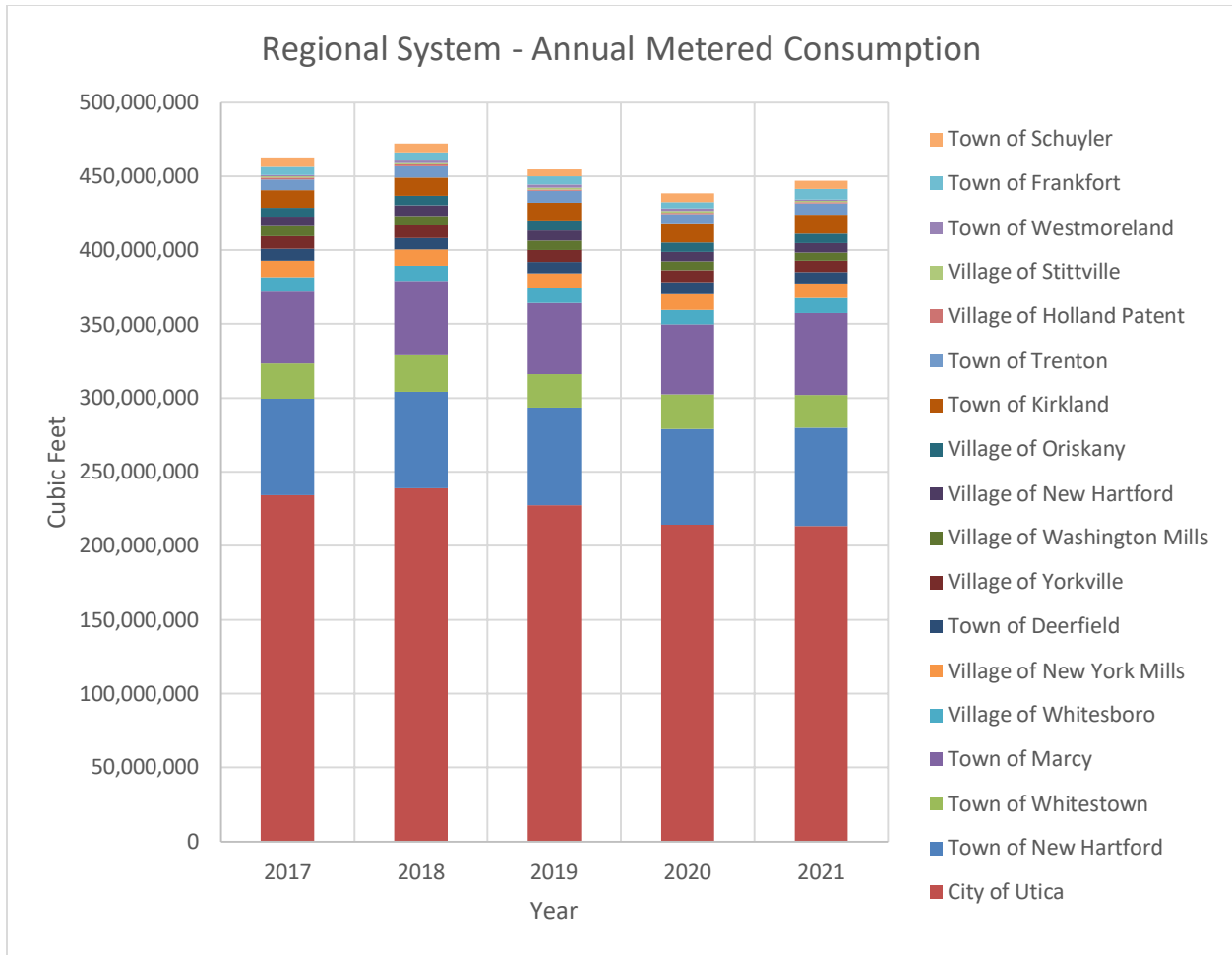
**Figure 3-2: Average Daily Demand**

Annual metered water consumption for the Regional Water System is listed by municipality for each of the previous five (5) years in Table 3-3. Approximately 76% of the consumption comes from the City of Utica (50%), the Town of New Hartford (15%), and the Town of Marcy (11%) combined.

**Table 3-3: Regional System – Annual Metered Consumption (cubic feet)**

Service Area	2017	2018	2019	2020	2021
Oneida County					
City of Utica	234,191,200	238,719,500	227,317,800	214,028,800	213,155,700
Town of New Hartford	65,252,200	65,246,100	66,161,800	64,792,700	66,683,800
Town of Whitestown	23,719,100	24,984,900	22,415,000	23,619,600	22,077,100
Town of Marcy	48,727,600	50,179,100	48,276,400	47,137,900	55,561,500
Village of Whitesboro	9,935,400	10,410,800	10,046,000	10,126,400	10,126,300
Village of New York Mills	11,033,400	10,783,400	10,007,600	10,477,200	9,905,900
Town of Deerfield	7,970,300	7,889,200	7,683,000	8,302,600	7,652,400
Village of Yorkville	8,505,300	8,493,600	8,315,000	7,981,200	7,745,400
Village of Washington Mills	6,752,400	6,471,100	6,147,600	5,734,700	5,653,900
Village of New Hartford	6,769,100	7,096,500	6,912,500	6,432,200	6,323,200
Village of Oriskany	5,729,500	6,401,300	6,707,300	6,544,900	6,168,300
Town of Kirkland	11,882,100	12,346,200	12,195,300	12,552,100	12,866,400
Town of Trenton	7,435,700	7,652,900	7,818,100	6,523,300	7,552,700
Village of Holland Patent	1,169,200	1,152,800	1,068,300	1,026,200	1,062,800
Village of Stittville	998,900	946,700	1,065,500	1,046,500	950,100
Town of Westmoreland	706,500	1,984,000	2,154,400	1,937,000	854,600
<i>Subtotal Oneida County</i>	<i>450,777,900</i>	<i>460,758,100</i>	<i>444,291,600</i>	<i>428,263,300</i>	<i>434,340,100</i>
Herkimer County					
Town of Frankfort	5,662,800	5,360,100	5,589,800	4,256,300	6,884,600
Town of Schuyler	6,424,100	5,774,000	4,708,800	5,979,200	5,713,600
<i>Subtotal Herkimer County</i>	<i>12,086,900</i>	<i>11,134,100</i>	<i>10,298,600</i>	<i>9,969,900</i>	<i>12,598,200</i>
Total Average, cubic feet	462,864,800	471,892,200	454,590,200	438,498,800	446,938,300

Source: MVWA



**Figure 3-3: Regional System – Annual Metered Consumption**

To illustrate the customer diversity base of the MVWA, the 20 largest customers during 2021 are listed in Tables 3-4. Combined, these users account for approximately 22.7% percent of the total consumption and the largest customer accounts for about 10% percent of the average daily water consumption. The majority of the 20 largest monthly users are institutional customers (sewer district, correctional facilities, education, hospitals and apartment complexes) which are expected to be relatively long-term, stable customers of the system.

On September 23, 2019, Cree Inc., now known as Wolfspeed, Inc. (“Wolfspeed”), a semiconductor manufacturer based in Durham, North Carolina announced it would build and equip a state-of-the-art, highly automated 200 mm silicon carbide wafer manufacturing facility on the campus of the SUNY Polytechnic Institute in Marcy, New York. The wafers are being used to supply the electric vehicle market. The plant operation is highly water-intensive and is supplied from new water transmission lines connected to the MVWA water distribution system.

Wolfspeed has invested \$1 billion and received an additional \$500 million in State capital grants. Wolfspeed is approximately halfway to meeting its hiring goal of 600 employees. Construction and tooling of the plant was completed in the late spring of 2022 and production began in July 2022.

Water use by Wolfspeed has averaged nearly 700,000 gallons per day since beginning production and is projected to remain at that level. It is estimated by the MVWA that Wolfspeed will be the largest customer of the Regional System in 2023.

**Table 3-4: Twenty (20) Largest Monthly-Billed Customers in CY 2021**

Usage Rank	Customer	Annual Consumption (Cubic Feet)	Annual Consumption (gals.)	Annual Billings
1	Midstate Correctional Facility	22,492,100	168,252,604	\$554,211
2	Matt Brewing Company, Inc.	13,678,700	102,323,789	\$346,651
3	St. Luke's Hospital	13,310,200	99,567,217	\$339,466
4	Oneida County Sewer District	9,279,300	69,413,989	\$235,915
5	Hamilton College	7,613,500	56,952,939	\$190,397
6	Marcy Correctional	5,437,100	40,672,335	\$141,608
7	Masonic Home	3,142,600	23,508,282	\$74,213
8	Municipal Housing (Tilden Ave location)	2,714,900	20,308,864	\$84,218
9	Con Med Corporation	2,628,500	19,662,547	\$71,025
10	St. Elizabeth Hospital	2,613,300	19,548,843	\$82,556
11	Weston Foods	2,370,300	17,731,077	\$62,710
12	Wolfspeed (Mirco-chip Plant)	2,153,900	16,112,292	\$71,578
13	Six Nations Apartments (formerly Intercoastal Prop.)	1,948,000	14,572,053	\$53,802
14	Wal-Mart Distribution Center	1,871,000	13,996,053	\$58,244
15	Adirondack Ridge Mobile Home Park	1,868,500	13,977,352	\$51,885
16	2200 Bleeker Street Properties	1,790,400	13,393,123	\$54,819
17	Utica College	1,661,500	12,428,884	\$52,713
18	Kennedy Plaza Apartments	1,601,300	11,978,557	\$46,445
19	Faxton Hospital	1,582,900	11,840,915	\$54,237
20	Office of Mental Health BSC-41534	1,408,900	10,539,305	\$42,988
	Totals	101,166,900	756,781,020	\$2,699,681

Source: MVWA

Notes: Under Public Authority Law, the Utica Zoo is exempt from water consumption fees

Table 3-5 illustrates the area's population growth based on current U.S. Census Bureau data.



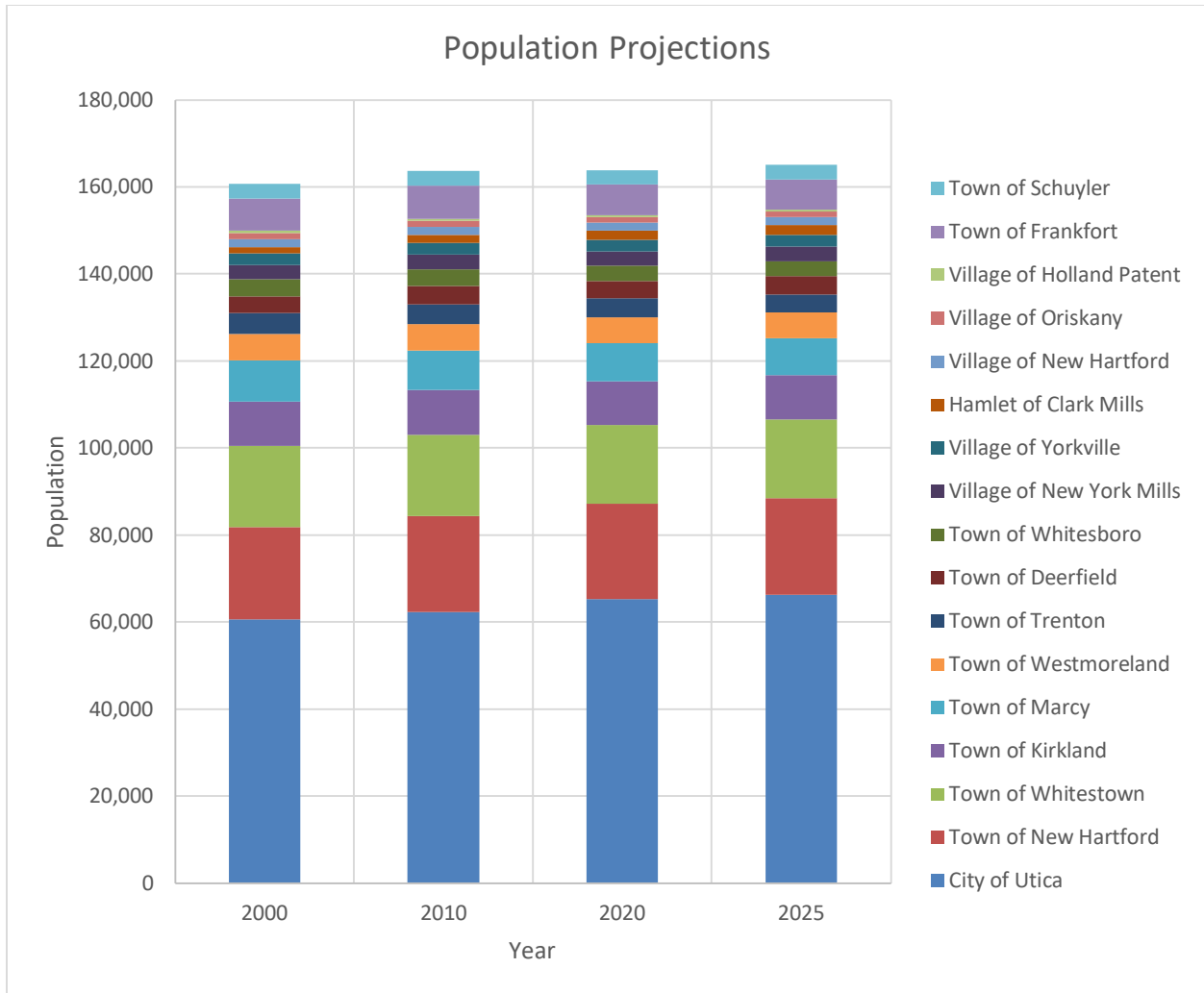
**Table 3-5: Population Projections (whole Towns, excluding Villages)**

	Census 2000 <sup>(1)</sup>	Census 2010 <sup>(1)</sup>	Census 2020 <sup>(1)</sup>	Est. 2025 <sup>(2)</sup>
City of Utica	60,651	62,235	65,283	66,197
New Hartford	21,172	22,166	21,874	22,264
Whitestown	18,635	18,667	18,118	18,086
Kirkland	10,138	10,315	10,075	10,129
Marcy	9,469	8,982	8,777	8,557
Westmoreland	6,207	6,138	5,924	5,877
Trenton	4,670	4,498	4,297	4,209
Deerfield	3,906	4,273	3,983	4,112
Whitesboro	3,943	3,772	3,612	3,527
New York Mills	3,191	3,327	3,244	3,294
Yorkville	2,675	2,689	2,657	2,660
Clark Mills	1,424	1,905	2,049	2,261
(V) New Hartford	1,886	1,847	1,859	1,844
Oriskany	1,459	1,400	1,315	1,283
Holland Patent	461	458	416	411
Herkimer County				
Frankfort	7,478	7,636	7,011	7,025
Schuyler	3,385	3,420	3,296	3,300
TOTAL	160,750	163,728	163,790	165,036

Source: US Census Bureau

Notes:

<sup>1</sup>Decennial Census data.<sup>2</sup>Projected using linear extrapolation of population data from US Census Bureau.



**Figure 3-4: Population Projections**

The MVWA tracks unaccounted for water in the distribution system. In CY 2022, the unbilled volume was determined to be 8.3 MGD (44.4% of ADD), a significant decrease from CY 2015 when there was 10.55 MGD (52.7%) unbilled volume. This unbilled volume is attributed to water main flushing, filter backwashing, plant processes, equipment and hydrant testing, firefighting, training fire fighters, street cleaning, and water main breaks and leakage. Additional details on the non-revenue water accounting are included in the MVWA’s annual NYSDEC Water Audit on file at the MVWA and the NYSDEC. The Authority has implemented a system to track non-revenue water. The following efforts are underway to accurately track non-revenue water:

- *Fire Departments* - Both training and firefighting usage will be tracked. The MVWA has begun an outreach effort with area fire departments to ascertain their training regimen and firefighting usage. At the request of the MVWA, the Utica Fire Department has modified their fire management software to track water use.
- *Hydrant Permits* - Usage is tracked by municipal and private use. A hydrant permit was created that requires increase reporting by permittees. Hydrant rings have

been installed on permitted hydrants making it easier to determine unauthorized usage.

- *Main Breaks* - A process is being developed to estimate water loss occurring due to main breaks. The method would take into account main size and pressure, and the time from discovery to shut off. If the break is large enough, the MVWA's Supervisory Control and Data Acquisition (SCADA) System data would be used to help estimate the water loss due to the break. Currently, water losses due to main breaks are estimated based on total water flow increase in the system during the period of between discovery of the main break and its repair.
- *Water Quality* - Water used for flushing watermains and water storage tanks is being measured and recorded.
- *District Meter Areas* - MVWA activated its first District Meter Area (DMA) in the Village of Holland Patent in 2019. Two (2) more are currently under development for the Hamlet of Washington Mills and the Luke Road Service Area. Water use in these areas will be closely monitored to track non-revenue water.
- *New Water Meters*- MVWA is currently pilot testing magnetic and sonic water meters to determine if they could be implemented throughout the system to track flow more accurately.

Continued implementation of the leak detection program will further reduce the amount of water withdrawn from the Hinckley Reservoir and filtered at the WTP. To this date, an assessment of the entire distribution system and the majority of the transmission mains have been performed at least once.

To improve the in-house leak detection program, the MVWA maintains leak detection equipment and has trained in-house personnel in its use. The equipment is used when leaks are suspected and/or when staff time allows a small-scope leak survey to be undertaken. In addition, the MVWA has installed five "Perma-loggers" in the distribution system which are designed to detect overnight water leakages using acoustics. The Perma-logger technology locates water system leaks over wide geographical areas. These have been installed on transmission mains for continuous monitoring purposes. An all-terrain vehicle has been purchased for use in monitoring and maintaining the Perma-loggers.

The MVWA's Emergency Response Plan specifies appropriate procedures to follow during interruptions of water supply, treatment, or distribution. Also included are Emergency Action Plans for their five (5) impoundment dams (excluding the State-owned Hinckley Reservoir dam).

The supply of treated water is SUFFICIENT to meet the demands of the Regional System. The available supply of treated water is 32 MGD, about 42% greater than the current

ADD of 18.7 MGD. The Regional System has significant storage in the distribution system (57.1 MG of total covered storage) to ensure adequate supply during peak demand periods.

#### 3.3.2.1 Impact of COVID-19 Pandemic

During periods of the COVID-19 pandemic, governmental orders resulted in the closure of colleges, hotels, restaurants, and other businesses, public schools moved to remote learning, and limitations were imposed on large public gatherings.

In March 2020, then-Governor Andrew Cuomo issued an Executive Order requiring businesses to reduce their workforces by 50%. Although the MVWA fell into the exempt category as an emergency service, MVWA nevertheless complied with the Executive Order.

Each department was split into two teams that rotated in and out on a weekly basis. No employees were furloughed, and all employees were paid during their weeks off. This occurred for eight weeks until the Governor announced the first wave of the reopening process. At that point, all employees returned to work full time, but water maintenance crews were required to report to remote locations that were converted to temporary operations centers. As of July 2022, all water maintenance employees began reporting back to the central maintenance facility.

During the eight weeks of workforce reductions, all emergency repairs were completed in a timely manner, but some preventive maintenance efforts were temporarily postponed. Deferred maintenance was caught up within three months following the return to full staffing.

As a result of the economic shutdown, water consumption decreased 120 million gallons or 3.50% in 2020 compared to the previous year. In 2021, water consumption partially recovered with an increase of 48 million gallons or 1.50% compared to 2020. In 2022, consumption increased by 6.90% compared to 2020, reflecting both a recovery post-COVID and the initial usage from manufacturing at Wolfspeed.

Despite the decrease in water consumption in 2020, water sales increased 1.30% compared to 2019 due in part to an increase in water rates. In 2021, water sales increased another 2.40% compared to 2020 the result of an increase in water consumption and rates. Overall revenue for 2021 increased 4.70% compared to 2020 as other fees and charges revenue recovered during the year.

Specifically, revenue sources consisting of penalties and delinquency charges decreased substantially in 2020, the result of provisions in the Governor's executive order to postpone imposing penalties for non-payment of water billings. This postponement carried over into May 2021 when penalties and delinquency charges were reinstated on outstanding water billings. For 2021, other revenue increased substantially exceeding 2020 other revenue by \$550,000 or 32.0%.

In 2020, operating expenses increased 7.30% compared to the previous year resulting in an overall increase in net position of \$1.3 million. For 2021, operating expenses decreased 5.20% compared to 2021 resulting in an overall increase in net position of \$3.8 million.

There continues to be some risk that the effects of the COVID-19 pandemic may adversely affect consumption and revenues in 2023 and subsequent years. The MVWA practice of maintaining a strong operating cash balance will help mitigate financial risks related to COVID-19 or other circumstances that may arise.

The future course of the pandemic is uncertain and will be determined by many factors, including vaccination rates, the effectiveness of vaccines in preventing infections, hospitalizations and deaths, adherence to public health mitigation measures, and the emergence of new virus variants. There can be no assurances as to what further impacts the pandemic may have on the population in the MVWA's service area or that new pandemic-related restrictions will not be imposed in the future. An outbreak of disease or public health emergency, including a resurgence of COVID-19, could have an adverse impact on water demand and usage and on the revenues of the Regional System.

### 3.3.3. Conclusion

The MVWA has the right to withdraw an adequate quantity of water from Hinckley Reservoir to serve the Regional System and growth forecast for the next 20 years. The Hinckley Reservoir safe yield has demonstrated over time to have adequate quantities of raw water for treatment. The MVWA does not plan to expand treatment capacity at the WTP until ADD approaches 30 MGD.

In the opinion of Consulting Engineers, the supply, treatment, and distribution system capacity is SUFFICIENT to meet the Regional System forecasted needs over the next five (5) fiscal years.

### 3.4. Facility Descriptions and Evaluations

In conjunction with the preparation of previous studies and reports, all major system facilities were previously evaluated through interviews with various Regional System personnel, and some were previously physically reviewed by the Consulting Engineer. All facilities are SUFFICIENT to meet the needs of the service area over the next five (5) fiscal years. This opinion assumes continued implementation of the recommended five (5)-year CIP. Capital improvement plans and associated costs are discussed in the Capital Improvement Program Section of this report.

#### 3.4.1. Treatment Facilities

The Regional System includes nine (9) active water treatment facilities. The main treatment facility is the WTP located in the Town of Trenton approximately 16 miles north of Utica. This facility was placed into service in 1992 at a cost of \$17 million. The WTP is the initial treatment facility for all water in the Regional System, with a capability to treat up to 32 MGD. The WTP has four (4) parallel treatment process trains and can provide the design capacity of 32 MGD with one (1) process train out of service for maintenance or cleaning. The treatment process, approved by the NYSDOH, includes chemical pretreatment followed by upflow clarification and high rate of filtration through granular activated carbon filters. The original mixed filter media was changed to granular activated carbon (GAC) to improve organics removal, which has increased water use (backwashing) and operating cost. MVWA replaces all GAC filter media annually. Final disinfection is provided by gas chlorination. A project to replace the existing gas chlorination system with a liquid chlorination system is currently underway and completion is anticipated in 2023. Fluoride is also added along with lime and soda ash for pH adjustment and corrosion control. New covered storage tanks and the corresponding removal of open reservoirs continue to reduce the need for corrosion control chemicals. Alternative methods of corrosion control are currently being studied by Corona Environmental Consulting.

A Facility Evaluation of the WTP was completed in November 2012. Recommended upgrade and replacement projects from this Study are continually being incorporated into the CIP. An upgrade to the corrosion control system is planned for 2023.

The remaining treatment facilities are the Deerfield Chlorination Station, the Marcy Chlorination Station (at Marcy Reservoir), the Hinckley Chemical Treatment Station (near Hinckley Dam), the Prospect Soda Ash Silo, the Southern Reservoir Pump and Chemical Feed Station, the Hangar Road Chlorination Facility, the Mallory Road Chlorination Station (Marcy) and the Higby Road Pump & Chlorination Station. These facilities are primarily used to maintain or enhance water quality prior to its delivery to the system customers. They include chlorination stations for disinfection and chemical addition for corrosion control. The inactive treatment facilities are the Ammonia Stations in Trenton, the Deerfield Reservoir, and the Pleasant Street Chemical

Treatment Station. The WTP and most satellite stations operating conditions have been incorporated into the SCADA system.

#### 3.4.2. Pumping Stations

The Regional System has twenty (20) pump stations of various types including in-line, booster, and hydropneumatic systems. Nineteen (19) are owned by the MVWA, and one (1) is owned by the Town of Frankfort. Fifteen (15) of the pump stations are in-line and booster pumps, which maintain specified system pressures while delivering large volumes of water to supply fire flows, fill water storage tanks, and sustain water demand. Seven (7) of the pump stations are hydropneumatic systems, which are smaller facilities capable of providing domestic water to a relatively small number of users, but are not typically used to provide fire flows or replenish storage tanks.

A new pump station is in the planning stages for the MVWA High-High pressure system, and the station is anticipated to be located near the intersection of Higby and Oneida Streets. This new station will act as a back-up to the Route 12 and Valley View Pump stations.

The MVWA CIP includes upgrading a few pump stations per year plus numerous smaller improvement projects.

#### 3.4.3. Water Storage Reservoirs

The source of raw water supply for the Regional System is the Hinckley Reservoir, which is owned by the State of New York. Additionally, the Regional Water System includes five (5) earthen impoundment open storage finished water reservoirs. Refer to Appendix C at the end of this Report. Of the five (5) reservoirs, three (3) are in active-standby status (Deerfield, Marcy and Southern – No. 4) and two (2) are out of service (Southern Nos. 2 and 5). Plans are being developed to decommission the Southern #5 reservoir. The Marcy reservoir was successfully decommissioned in 2020. Southern #5 is to be drained, and Southern #2 is to be converted to a stormwater basin.

#### 3.4.4. Storage Tanks

The Regional System has twenty-eight (28) water storage tanks in active service with a combined storage volume of 57.7 million gallons including the second Clearwell at Hinckley WTP, the Marcy Tank, Trenton Road Tank, and the Toby Road Tanks. The tanks maintain system pressures and provide water storage for daily use, emergencies, and fire protection. Materials of construction include welded or riveted painted steel, bolted glass-fused-to-steel plates, and pre-stressed concrete.

The MVWA conducts a tank maintenance program to inspect and clean its tanks every five (5) years using potable water divers. Approximately five (5) tanks are inspected and cleaned each year under the diving program.

Projects currently in planning or design include five (5) new tanks, including two (2) 12-15 MG tanks on Cavanaugh Road and Toby Road sites. A new 1.2 MG concrete is now in service on Snowden Hill to serve the High Zone. An existing 1.0 MG concrete tank on Welschbush Road was rehabilitated in 2021.

#### 3.4.5. Meter Stations

There are 33 master meters located throughout the Regional System that measures the amount of water distributed to primary service areas. In addition, there are 11 pump stations with elapsed time meters that are used to approximate total flows.

The majority of the projects identified under the CIP are minimal and generally consist of minor interior pipe, valve, and instrumentation replacements, as well as minor building repairs. Meter flow rates are incorporated into the SCADA system.

The MVWA CIP includes the evaluation for the possibility of using an Advanced Metering Infrastructure (AMI) system at many of the meter station locations as opposed to their current system. Also as indicated in the CIP are five (5) new meter stations located at the following locations: Hayes Road Meter Station, Hinman Road Meter Station, Luke Road Metering Station, Mapledale Meter for Water District 1, 2, and 3, and Marcy Transmission Main.

#### 3.4.6. Regulating Stations/Altitude Valves

There are 59 regulators located at 32 regulating stations throughout the Regional System including the Deerfield Tank Control Building. The regulation stations are designed to prevent excess water pressures from occurring within the transmission and distribution system. Many of these facilities have been identified for various upgrades and numerous capital improvement projects are identified. A regulating station is planned for reactivation and upgrades to provide a second feed to the Town of Frankfort. In 2016, bypass piping was installed by MVWA.

The Regional System also has 16 altitude valves typically located at each water tank that is not supplied by pumping. The altitude valves function to regulate the flow in and out of the water tanks. These facilities are in good repair, and other than normal maintenance, no significant capital improvements are identified.

MVWA has installed 30 remote pressure monitoring units at regulating stations and altitude valves to reflect inlet/outlet pressures and valve positions. This data is relayed to MVWA's updated SCADA system. MVWA has also installed six smart hydrants for pressure monitoring of an area of the distribution system prone to leaks, which are also tied into the SCADA system.



### 3.4.7. Transmission and Distribution Mains

The Regional System includes approximately 700 miles of transmission, supply, and distribution mains (the latter are typically 12-inches and smaller in diameter). The oldest water mains are generally located within the City of Utica and Villages of Yorkville, Whitesboro, and New York Mills. The majority of new distribution main construction has been to serve expanding area within the Towns of Deerfield, Whitestown and New Hartford. Costs for this design and construction have been borne primarily by the Towns. Where modifications to town projects will provide a regional benefit, the MVWA has provided financial contributions to pay for increased capabilities. Upon completion of Town projects, the water infrastructure is turned over to the MVWA for ownership and operation. Debt service remains the responsibility of the Towns. The most recent CIP includes \$3,900,000 allocated to water main replacement projects in FY 2023.

The Geographic Information System-based (GIS-based) prioritized inventory of water main replacement project is currently being updated and provides scheduled main replacements. This inventory accounts for various parameters such as pipe age, size, material, leakage, and break history.

Parallel 24-inch and 36-inch diameter transmission mains extend from the Hinckley Reservoir to the water treatment plant. A study of the raw water transmission main facilities and capabilities was completed that reviewed alternate main sizes for a third raw water transmission main from the Hinckley Reservoir to the Hinckley Water Treatment Plant in Prospect, NY. In addition, the study reviewed the effect that Reservoir elevation would have on capacity, the ability to transmit up to 48.5 MGD, and the impact of the main size on the hydro-turbine facilities. MVWA continues to plan for future upgrades and maintenance to the existing raw water transmission mains. A \$3,000,000 WIIA grant was awarded for the replacement of 5,000 LF of 54" diameter raw water main from the Hinckley Reservoir intake to the WTP (Phase 2 of the Raw Water Main Project). The total estimated cost for Phase II of the Raw Water Main Project was \$10,000,000 in 2020. \$7,000,000 in costs of Phase II of the Raw Water Main Project were funded with proceeds of the Series 2020A Bonds. However, delays and supply chain price escalations relating to the COVID-19 pandemic have increased the total cost by \$5,000,000, which is expected to be funded with proceeds of the Series 2023 Bonds. Design of Phase II of the Raw Water Main Project is nearly complete. It is expected to be bid and awarded during the summer of 2023 and completed by the end of the 2023 calendar year.

Finished water is conveyed through extension of the same 24-inch and 36-inch transmission mains, including some 30-inch diameter pipe, from the WTP to the Marcy and Deerfield Reservoir sites. These lines are interconnected at intervals of 1- to 2-miles. Approximately 2,000 linear feet of 24-inch diameter water mains were

constructed as part of the Cavanaugh Road bypass transmission main, which is now complete. Valves are located such that any one segment of either line could be taken out of service without affecting the flow through the balance of the pipeline. The entire water transmission system from Hinckley operates without the use of pumps due to the difference in elevations between the Hinckley Reservoir and the Toby Road, Marcy, Deerfield and Southern Reservoirs sites.

The Regional System operates principally on four (4) different major service zones in the service area due to the change in elevation across the geographic area. Tanks and pump stations are necessary to provide service to the two (2) major service zones at higher elevations.

The lowest elevation of the distribution system, the Low Service Zone, generally comprises the area along the Mohawk River from Oriskany through downtown Utica eastward into the Town of Frankfort. The Low Service Zone is supplied from the Deerfield Tank with parallel 20-inch and 30-inch feed lines connecting to the distribution system and the Southern Reservoir on Pleasant Street in the Town of New Hartford.

The next higher elevation in the distribution system, the area designated as the Intermediate Service Zone, is served either by the 24-inch line or 30-inch line from the Marcy Tank with pressure regulated at the Maynard Station. This zone generally serves the areas in the Town of New Hartford, Town of Whitestown and the City of Utica south of Burrstone Road.

Higher elevations in the southeasterly portion of the distribution system include two (2) service zones, "High" and "High-High", which are served by pumps and storage tanks utilizing stored water in the Sanger Avenue, the Sherrillbrook Park, the Cascade Drive (Southern Reservoir), and Valley View Road Tanks. The Upper Higby Tank in the Town of Frankfort serves primarily customers in the Town of New Hartford. This minor service zone is termed the "Upper Higby Tank Service Zone".

The transmission and distribution system is capable of meeting peak water demands in each of the Low, Intermediate, High, and High-High Service Zones.

The MVWA has a GIS based hydraulic model of the entire Regional Water System using InfoWater™ by Innovyze. InfoWater™ is a nationally recognized software program that provides a high level of accuracy in assessing and evaluating the hydraulic performance of the water system. The model is also a valuable tool for planning system expansions and in support of economic development. The effort of developing the model included field location using Global Positioning Satellite, or "GPS technology", of valves, hydrants, etc. as well as hydraulic modeling and calibration to within acceptable standards. The

hydraulic model is also used to identify sampling points for MVWA's required testing under EPA Disinfection By-Products Rule.

MVWA's 5-year CIP includes a strong focus on improving the transmission and distribution systems. The 5-year cost estimate identified in the CIP is approximately \$18 million. Of that cost estimate, approximately \$8 million is allocated to the replacement of existing transmission and distribution mains. The remainder of the costs are allocated to the cleaning, lining, and repair of existing mains, and the installation of new transmission mains.

The MVWA CIP estimates \$5,600,000 will be spent on cleaning, lining, and repairing transmission and distribution mains from FY 2023 through FY 2027.

#### 3.4.8. Hydroelectric Generating Facilities

The MVWA owns and operates two (2) hydroelectric generating facilities. Both are single, in-line turbine plants with a combined installed capacity of 450 kW. One is located within the WTP and the other is located approximately 1-mile downstream on the transmission mains. They were constructed at the same time as the WTP. Both have piping and valving for bypass operations to permit maintenance or when the hydraulic conditions do not permit their satisfactory operation. Both facilities are owned and operated by the MVWA. These facilities are inspected annually by a high voltage electrical services contractor. The building associated with the hydroelectric generating facilities are maintained by the MVWA's Maintenance Department. The MVWA has evaluated the economic feasibility of installing one or two (2) additional on-line turbines on the Transmission Mains.

A third turbine is located at the Deerfield Tank and Reservoir site. This is a hydro-turbine, driven by potable water flow, and is directly coupled to the Reservoir's recirculation pump. As a result of the use of hydropower, the cost saving to the MVWA is approximately \$15,000 per year in electrical costs.

#### 3.4.9. Headquarters and Maintenance Facilities and Assets

The Authority has worked to improve its Headquarter and Maintenance Facilities. These improvements included new concrete entrance aprons, sidewalk replacement, and landscaping between the curb and sidewalk, which were recently completed at the Kemble Street Maintenance Facility. The facility also selected areas of pavement to be repaved and the existing gravel storage area was regraded. This project was completed to accent the reconstruction project occurring at the Kemble St. Park. In addition to site improvements, the facility took efforts to eliminate pigeon roosting and nesting occurring in the loading dock and exterior storage bays, eliminating the need for an abatement contractor to remove and sanitize facility surfaces. To eliminate pigeons from the facility, sheathing was installed throughout the walls and ceilings, existing

insulation in the heated gravel bay was replaced, and bird slides and spikes were installed on rafters and beams.

Future improvements to the facility involve increasing security measures to limit and control access to the site by tracking employees via a key card or comparable technology, which is in line with security upgrades by City Hall and the City of Utica.

As well as site improvements at the Kemble St. facility, the Authority continues to lower the average age of its equipment fleet by purchasing new vehicles. MVWA plans to purchase two (2) new wheeled backhoes, a wheeled loader, and several smaller vehicles in 2020.

With the purchase of more equipment and vehicles, the Maintenance Department continues to require additional indoor storage space for their fleet, since their only storage facility is the Kemble Street Maintenance Facility. Due to the lack of available storage, a portion of the equipment and vehicles are being stored outside and are susceptible to winter conditions, causing operational inconvenience to the staff. With limited storage inside, selected equipment and/or vehicles must endure the winter conditions, placing additional wear and tear on the equipment and vehicles.

The Authority is continuing its efforts to increase storage space for the Maintenance Department. Recent projects at the Kemble St. facility have increased its storage space within the building, but there is no available space on the parcel to build an addition more storage. Therefore, other Authority's properties are being evaluated for future potential storage, such as the Marcy Reservoir and Southern Reservoir. The current conceptual design is a 2,000 to 3,000 square foot structure, constructed as a pole barn or steel truss building.

The Authority is also in the process of implementing security upgrades at their headquarters, which is leased from the City of Utica.

#### 3.4.10. Other Facilities

Facilities that do not fall into the above categories include:

- Two (2) raw water pipe bridges that support the two (2) 20-inch diameter steel water mains that cross the West Canada Creek leading to the WTP;
- Intake structure at the Hinckley Dam;
- Hinman Road Storage Building;
- Southern Reservoirs Keeper's House & Garage;
- Prospect Pool Intake (never utilized, standby service only);
- Marcy Reservoir Garage/Equipment Building;
- Southern Reservoirs Interconnection Station;

- Regional System operational improvement projects including system-wide SCADA and GIS for the watershed and distribution system.

#### 3.4.11. Hydraulic Profile

Appendix D contains a schematic of the existing system's hydraulic profile.

## 4.0 CAPITAL IMPROVEMENT PROGRAM

### 4.1. General Description

The MVWA is required to annually undertake an examination of the Regional System and also prepare a plan for Capital Improvements which is updated periodically as conditions change. The Capital Improvement Program (CIP) is prepared to present the results of the Regional System evaluation, project recommendations, and project cost estimates for the ensuing five (5) years and beyond. The CIP is utilized by the MVWA to plan, schedule, and finance projects. Copies of the CIP are also distributed to municipalities and regulatory agencies to update them on Regional System plans and improvements. The current two-year project list has been approved by the Board and Finance Authority.

A significant effort has been made since 1998 to upgrade the system through a prioritized improvement program targeting deficient service areas. The five (5)-year 2023-2027 program includes about \$28,571,000 in recommended improvements, \$22,130,000 of which will be funded via the issuance of capital bonds.

As discussed, the MVWA Capital Improvement Program is one that is continually updated to account for completed projects and improvements as well as changing conditions within the system. In addition to current needs, the Authority focuses on the importance of each issue or problem. Each item is designated with a "Priority" level thereby identifying its rank for implementation. Refer to Table 4-1 for a complete description.

Level	Description
1	Remediate imminent public health risks
2	Remediate health and safety risks for Authority
3	Comply with current regulatory requirements
4	Solve problems related to inadequate water pressure of flow, comply with MVWA standards
5	Improve reliability and/or redundancy of supply
6	Routine replacement/upgrades
7	Cost effectiveness of system expansion or acquisitions

Priority Level 1 projects are deemed the most serious and in need of urgent attention. Priority 7 projects have the least significant need for attention. Overall, the CIP is a thorough analysis of the current situation and best-planning of financial resources.

The current five-year Capital Improvement Program runs from FY 2023 through FY 2027. Each of the recommended capital projects identified in the proposed CIP will require final MVWA (and potentially other governmental) approval and State Environmental Quality Review (SEQR) review prior to implementation.

The following projects (cash-funded and bond-funded) are included in the current CIP budget for FY 2023:

**Table 4-1: Summary of Proposed 2023 Capital Improvement Projects**

<b>CIP Facility</b>	<b>Project</b>	<b>Cost</b>
Treatment Facilities	Deerfield Chlorination & Meter Station Improvements	\$40,000
	Hinckley WTP Corrosion Control Upgrades	\$350,000
Storage Tanks	Clark Mills Tank Site Remediation	\$50,000
	Gilbert Road Tank Demolition	\$200,000
	Haddon Street Tank Site Remediation	\$50,000
	Merritt Place Tank Site Remediation	\$50,000
	Shacksbury Road Tank #1 Site Remediation	\$50,000
	Smith Hill Tank Site Remediation	\$50,000
	West Street Tank Site Remediation	\$50,000
	Valley View Tank Site Fencing	\$60,000
Metering Stations	Cavanaugh Road Tank Meter Building Improvements	\$50,000
Transmission/ Distribution Mains	DOT Water Main Opportunity Replacement	\$2,900,000
	Hinckley Raw Water Main Phase 2	\$2,000,000
	FEMA Storm Damage Repair	\$50,000
	Kemble Street Maintenance Building Improvements	\$30,000
<b>TOTAL</b>		<b>\$5,980,000</b>

#### 4.2. CIP Cost Summary

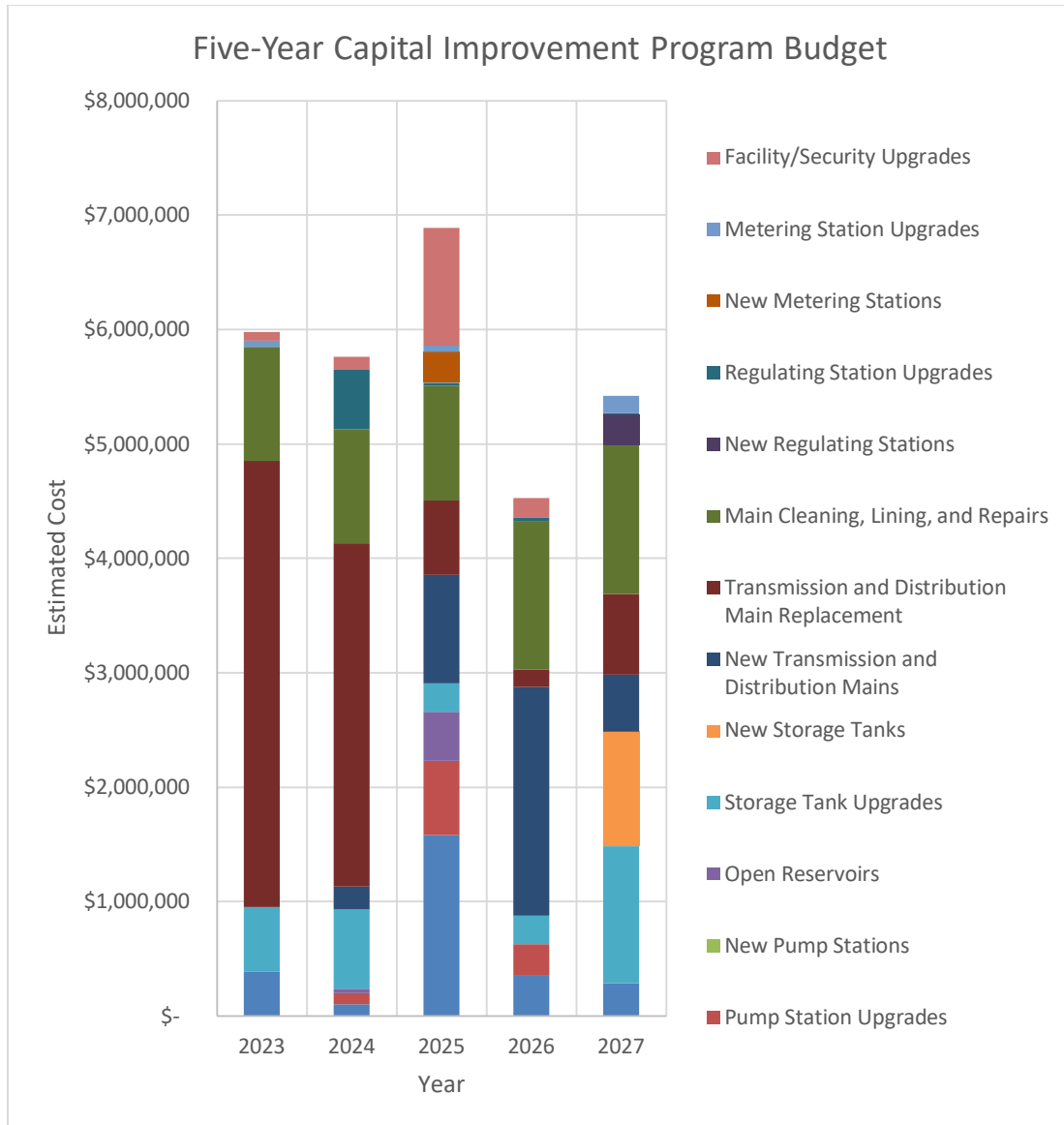
The following table is a summary of the MVWA's current Five (5)-Year and long-range Capital Improvement Program budget.

**Table 4-2: Summary of Five-Year Capital Improvement Program Budget**

Facility	FY 2023	FY 2024	FY 2025	FY 2026	FY2027	FY2028 - FY2037	Est. Long Range Cost
TREATMENT FACILITIES	\$390,000	\$100,000	\$1,580,000	\$350,000	\$285,000	\$1,280,000	\$3,985,000
PUMP STATIONS							
A. Pump Station Upgrades	\$0	\$100,000	\$650,000	\$275,000	\$0	\$545,000	\$1,570,000
B. New Pump Stations	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OPEN RESERVOIRS	\$0	\$40,000	\$430,000	\$0	\$0	\$0	\$470,000
STORAGE TANKS							
A. Tank Upgrades	\$560,000	\$690,000	\$245,000	\$250,000	\$1,200,000	\$2,135,000	\$5,080,000
B. New Tanks (storage)	\$0	\$0	\$0	\$0	\$1,000,000	\$2,500,000	\$3,500,000
METERING STATIONS							
A. Metering Station Upgrades	\$50,000	\$0	\$50,000	\$0	\$150,000	\$0	\$250,000
B. New Metering Stations	\$0	\$0	\$270,000	\$0	\$0	\$0	\$270,000
REGULATING STATIONS							
A. Regulating Station Upgrades	\$0	\$515,000	\$31,000	\$30,000	\$10,000	\$110,000	\$696,000
B. New Regulating Stations	\$0	\$0	\$0	\$0	\$275,000	\$200,000	\$475,000
TRANSMISSION MAINS & DISTRIBUTION							
A. Cleaning, Lining, and Repairs	\$1,000,000	\$1,000,000	\$1,000,000	\$1,300,000	\$1,300,000	\$13,000,000	\$18,600,000
B. Replacement	\$3,900,000	\$3,000,000	\$650,000	\$150,000	\$700,000	\$36,000,000	\$44,400,000
C. New Transmission Distribution Mains	\$0	\$200,000	\$950,000	\$2,000,000	\$500,000	\$16,000,000	\$19,650,000
OTHER FACILITIES							
A. Facility/Security Improvements	\$80,000	\$115,000	\$1,030,000	\$170,000	\$0	\$0	\$1,395,000
Subtotal – Cash Capital	\$1,290,000	\$1,300,000	\$1,231,000	\$1,310,000	\$1,310,000	\$13,435,000	\$19,876,000
Subtotal – Capital Bond	\$4,690,000	\$4,460,000	\$5,655,000	\$3,215,000	\$4,110,000	\$58,335,000	\$80,465,000
<b>TOTALS</b>	<b>\$5,980,000</b>	<b>\$5,760,000</b>	<b>\$6,886,000</b>	<b>\$4,525,000</b>	<b>\$5,420,000</b>	<b>\$71,770,000</b>	<b>\$100,341,000</b>

Source: MVWA





**Figure 4-1: Five-Year Capital Improvement Program Budget**

Since the inception of the Capital Improvement Program, nearly \$86 million has been expended on Regional System Improvements and upgrades. Approximately half the funds were used to construct six (6) new tanks in order to remove old, open storage reservoirs from active service. The balance of the monies funded general water main replacements, pump station upgrades, new and renovated tanks and various safety and security projects.

**4.3. Water System Expansion Plan**

The MVWA has draft plans to expand its water system capacity from 32 MGD to 48.5 MGD in order to accommodate potential new development at the Marcy Nanocenter or other areas. As part of the proposed capacity expansion, the MVWA has draft plans to expand, if necessary to accommodate a new major industrial manufacturer, its WTP, add two (2) new 15 MG water

tanks, two (2) new smaller system tanks, a new 54-inch raw water main, new 24-inch and 48-inch finished water main, and conduct various other repairs to existing water mains. The cost of these improvements is projected to be in the range of \$150 million and is currently not included in the capital improvement plan budget. In December 2018, Jacobs Engineering Group Inc. prepared a report entitled “Water System Capacity Expansion Plan” on behalf of the MVWA that laid out recommendations for proceeding with the capacity expansion project if needed. The Authority does not anticipate proceeding with the water system capacity expansion plan without identifying sources of funding, such as NYS grants or subsidies and additional revenues that will pay for the water system expansion plan’s costs. The MVWA long range CIP budget, which does not include the water system capacity expansion plan, is \$100,341,000.

## 5.0 REVENUE BOND SERIES 2023 SUMMARY

The MVWA plans to issue Water System Revenue Bonds (Series 2023) to finance recommended improvement projects for 2023 and 2024 detailed in the CIP. The proposed Series 2023 Bonds will fund a total of \$9,150,000 in capital projects. Projects to be funded with Series 2023 Bonds include treatment facility improvements, pump station improvements, reservoir improvements, storage tank improvements, metering & regulating station improvements, transmission and distribution main improvements, and other miscellaneous projects. The table below summarizes all projects being funded by the Series 2023 bonds.

**Table 5-1: Summary of Series 2023 Bonds**

Location	Project	Total FY2023 Budget	Total FY2024 Budget	Subtotal
<b>Treatment Facilities</b>				
Deerfield Chlorination & Meter Station	Station Improvements	\$40,000	-	
Hinckley WTP	Corrosion Control Upgrades	\$350,000	-	
	Concrete Eval. & Repairs	-	\$100,000	
	<b>Subtotal</b>	<b>\$390,000</b>	<b>\$100,000</b>	<b>\$490,000</b>
<b>Pumping Stations</b>				
Pleasant St. PS	PS Repairs	-	\$100,000	
	<b>Subtotal</b>	<b>-</b>	<b>\$100,000</b>	<b>\$100,000</b>
<b>Open Reservoirs</b>				
Southern Reservoir	Site Fencing Upgrades	-	\$40,000	
	<b>Subtotal</b>	<b>-</b>	<b>\$40,000</b>	<b>\$40,000</b>
<b>Storage Tanks</b>				
Clark Mills Tank	Site Remediation	\$50,000	-	
Haddon St. Tank	Site Remediation	\$50,000	-	
Merritt Pl. Tank	Site Remediation	\$50,000	-	
Shacksbury Tank	Site Remediation	\$50,000	-	
Smith Hill Tank	Site Remediation	\$50,000	-	
West St. Tank	Site Remediation	\$50,000	-	
Hangar Rd. Tank	Tank Rehab	-	\$350,000	
Misc.	Site Fencing Upgrades	-	\$85,000	
	<b>Subtotal</b>	<b>\$300,000</b>	<b>\$435,000</b>	<b>\$735,000</b>
<b>Metering Stations</b>				
Cavanaugh Rd. Tank	Meter Building Improvement	\$50,000	-	
	<b>Subtotal</b>	<b>\$50,000</b>	<b>-</b>	<b>\$50,000</b>
<b>Regulating Stations</b>				
Marcy Regulator	Preliminary Engineering	-	\$515,000	
	<b>Subtotal</b>	<b>-</b>	<b>\$515,000</b>	<b>\$515,000</b>
<b>Transmission and Distribution Mains</b>				
Water Mains & Related Facilities	DOT Water Main Opportunity Replacement	\$1,900,000	-	

	Hinckley Raw Water Main Phase 2	\$2,000,000	\$3,000,000	
	FEMA Storm Damage Repair	\$50,000	-	
	12" Main Loop – Yorkville	-	\$100,000	
	6" Fire Flow Loop – New Hartford	-	\$100,000	
	<b>Subtotal</b>	<b>\$3,950,000</b>	<b>\$3,200,000</b>	<b>\$7,150,000</b>
<b>Other Facilities</b>				
	Hinman Road Fencing & Repairs	-	\$70,000	
	<b>Subtotal</b>	<b>-</b>	<b>\$70,000</b>	<b>\$70,000</b>
	<b>TOTAL</b>	<b>\$4,690,000</b>	<b>\$4,460,000</b>	<b>\$9,150,000</b>

## 6.0 REGULATORY STATUS

Water produced by the MVWA is subject to the requirements of a number of regulations. These regulations include the Federal Safe Drinking Water Act (SDWA) and the New York State Sanitary Code. The SDWA established National Interim Primary Drinking Water Regulations (NIPDWRs), which cover contaminants that have adverse effects on human health. The regulations are under the jurisdiction of the USEPA. The SDWA also developed Secondary Drinking Water Regulations (SDWR's) that cover contaminants that adversely affect the aesthetic quality of drinking water, such as taste, odor, and appearance. The New York State Department of Health (DOH) has been granted authority by the US EPA to monitor and enforce all Federal and State regulations.

### 6.1. Drinking Water Standards

Currently, the MVWA is meeting or exceeding all New York State and Federal Water Quality standards.

The Water Quality Department annually publishes a Drinking Water Quality Report for the preceding year. The MVWA also completes the Consumer Confidence Report. Both reports are available at [www.mvwa.us](http://www.mvwa.us).

The MVWA Water Quality Department continues to direct treatment operations at the WTP through an agreement with SUEZ, an international contract operations and management company. The laboratory operates to analyze and control distribution system water quality and as a commercial laboratory offering water quality testing to private homeowners, home inspectors, other utilities, and regulatory agencies. The Department continues to monitor the Hinckley watershed, source water for the Regional System, on a regular basis.

The MVWA Water Quality Laboratory has been expanded to meet the growing concerns for safe water. The laboratory is accredited through the NYS Environmental Laboratory Approval Program (ELAP) and carries secondary accreditation in Pennsylvania as well. The lab expanded the number of accredited analytes in 2020.

Additionally, the department continues to actively participate in identifying water quality characteristics and potential solutions with neighboring utilities. It has directed the water quality sampling and monitoring efforts and coordinated populating the associated database to allow for managerial decisions to be made by those neighboring utilities and consultants.

Besides ensuring that routine monitoring requirements are met by the system, the Water Quality Laboratory is engaged in a variety of research projects related to emerging contaminants, utility management, and innovative practices for successful utility operations.

EPA promulgated the Lead & Copper Rule Revisions ("LCRR") in December of 2021. This regulatory framework provides additional measures to reduce lead exposure from drinking water and better protect public health. The LCRR has many facets for utility compliance

including lead service line identification, increased monitoring and/or treatment of lead in drinking water starting in 2025, creation of a “trigger level” that if exceeded, while not a violation, will require additional protective measures, lead service line replacements, and enhanced public education and awareness.

Two intensive requirements immediately impacting the MVWA’s compliance are completing a lead service line inventory and re-optimization of corrosion control. The inventory must detail all lead service lines on both the homeowner and utility-owned sides and this database must be publicly available on the MVWA website by October 16, 2024. Historical data suggests that MVWA will not comply with the newly established trigger level and will need to reoptimize its corrosion control strategy for lead reduction and evaluate the use of phosphates to control lead release. To this end, the MVWA has engaged with Corona Environmental Engineers of NY to coordinate a pipe loop study to evaluate the use of orthophosphate as a control for lead release. The project requires many hours of staff time for study, design, and construction, sample collection & analysis, data evaluation, and coordination with state and local regulatory agencies. The project is anticipated to last from 18-24 months.

Additionally, EPA advised when the LCRR was announced that the rule was not aggressive enough towards the agency’s goal of reducing lead exposures. EPA is committed to issuing a follow-on rule to be known as the Lead & Copper Rule Improvement (“LCRI”) by the time compliance with the LCRR begins in 2025. The contents of the LCRI or what effect the LCRI may have on the MVWA remain to be seen.

## **6.2. Cross Connection Control**

New York State water suppliers are required by DOH to maintain a Cross Connection Control (CCC) program. The program’s purpose is to protect the public safety from contamination by misuse, whether inadvertent or otherwise. The program includes conducting a hazard survey of users and requirements for installation of special valves on water service lines to prevent users’ water from returning to the public water distribution system. The number of backflow prevention devices on MVWA services has increased from about 200 in 2001 to 1,632 as of the end of July 2022. NYSDOH requirements for annual testing of these devices are being emphasized. The MVWA’s Engineering Department reviewed staffing levels necessary to efficiently continue, as well as expand, the CCC program and its responsibilities for public health, security and operational effectiveness and determined current staffing levels were adequate.

## **6.3. Water Supply Permit**

The NYSDEC issued a Water Supply Permit (WSP) in 1996 to the MVWA authorizing withdrawal of water from the Hinckley Reservoir, as well as operation of the Regional System. The Water Supply Permit requires that the MVWA annually conduct a water system audit to determine an accurate quantity of unaccounted for water and a study of the system to determine the quantity of leakage. It is further required that the MVWA develop a program for reduction of the leakage. In 2020 and 2021, a total of 295 repairs were made. Of these, 79 were watermain

repairs, 73 were fire hydrant repairs, and 143 were service line repairs. The MVWA is coordinating the new WSP with the NYSDEC. The current WSP remains in effect.

#### **6.4. Discharge Permit**

The Water Treatment Plant (WTP) operates under a NYSDEC wastewater discharge permit (NY0218481). The permit is issued pursuant to the State Pollution Discharge Elimination System (SPDES) which allows the WTP to discharge flow from backwash lagoons into the West Canada Creek adjacent to the WTP property. The lagoons treat backwash water from the WTP process to allow settling of solids and decanting of the clear water supernatant. MVWA agreed to the issuance of a Consent Order by NYSDEC in 2016 related to a plant upset in 2014. Currently, the SPDES permit is under review by the NYSDEC under its Environmental Benefits Permits Strategy (EBPS) program. It is anticipated that a new permit will be issued in the near term with some modifications to the current permit conditions.

#### **6.5. State Environmental Quality Review Act (SEQR)**

Actions of the MVWA involving certain projects are subject to the State Environmental Quality Review Act (SEQR), codified at Article 8 of the New York Environmental Conservation Law. All MVWA projects are screened for SEQR applicability. If a project is subject to SEQR, an Environmental Assessment Form is prepared and reviewed by the MVWA. When it is the SEQR Lead Agency for a project, the MVWA proceeds to make a Determination of Significance under SEQR after identifying the relevant areas of environmental concern, thoroughly analyzing each environmental concern, and providing a written, reasoned elaboration supporting its determination. If there exists the potential for at least one (1) significant adverse environment impact, the MVWA issues a Positive Declaration under SEQR and prepares a Draft Environmental Impact Statement for public review and comment. Upon completion of a Final Environmental Impact Statement, the MVWA publishes its SEQR findings which consider the relevant environmental impacts, facts, and conclusions disclosed in the Final Environmental Impact Statement; weighs and balances relevant environmental impacts with social, economic, and other considerations; provides a rationale for the MVWA's decision; certifies that the requirements of SEQR have been met; and certifies that consistent with social, economic, and other essential considerations from among the reasonable alternatives available, the project is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that any adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating conditions to the decision those mitigating measures that were identified as practicable.

When designated a SEQR Involved Agency for a project, the MVWA coordinates SEQR with the Lead Agency and other Involved Agencies and, if a project has been the subject of a Final Environmental Impact Statement, publishes its own SEQR findings.

Many of the actions undertaken by the MVWA fall under the Type II category and are not subject to review under Environmental Conservation Law, Article 8.

**6.6. Bulk Storage**

The MVWA has above and below grade bulk petroleum and chemical tanks that are subject to USEPA/NYSDEC Regulations. All of the MVWA's tanks in service are in compliance; tanks no longer in service have been removed or closed in compliance with NYSDEC standards. A 2019 NYSDEC inspection of the bulk fuel oil tank revealed one minor issue which was immediately corrected. A 5-year update of the MVWA bulk storage plan is currently underway.

**6.7. Dam Safety**

As part of a continued upgrade of dam oversight, the New York State Department of Environmental Conservation (DEC) issued revisions to Part 673 Dam Safety Regulations, dated August 19, 2009. These regulations require more dam inspections, regular maintenance, and better record keeping and planning for emergencies. The MVWA is complying with the current requirements.

The regulations require owners to demonstrate that their dams are being properly maintained and that they meet modern safety standards. They also include specific responsibilities for a dam owner to ensure ongoing safety, such as record-keeping requirements, inspections and maintenance (I&M) plans, scheduled inspections by a professional engineer who works for the dam's owner, scheduled safety assessments to confirm that a dam meets modern safety criteria, Emergency Action Plans (EAPs) to assist first responders (which the MVWA currently have), and annual certification that documents that the I&M Plans and EAPs are in effect and up-to-date.

Recent NYSDEC Dam Safety inspections reportedly found minimal issues to resolve such as vegetative cover removal and burrowing-rodent control which are being addressed by the MVWA. A boom mower and tractor are used for maintenance of the embankments. The MVWA is pursuing the decommissioning and breaching of both the Marcy Reservoir and Southern Reservoir #5 and several engineering assessments are underway or being planned.



## **7.0 CONCLUSION**

In the opinion of the Consulting Engineers, the MVWA is currently meeting the water quality requirements of applicable regulations, permits, and licenses under State and Federal Law. The MVWA will be able to continue this record of compliance and is actively working toward complying with NYSDEC requirements for a water conservation program as outlined in the Water Supply Permit, assuming the CIP is implemented, and necessary staff additions continue to be made.

**REFERENCES**

**There are no sources in the current document.**

**APPENDIX A**  
**JACOBS WATER SYSTEM CAPACITY EXPANSION PLAN EXECUTIVE SUMMARY**



**JACOBS®**

# Water System Capacity Expansion Plan

Program Management Plan

December 2018

Mohawk Valley Water Authority



**Water System Capacity Expansion Plan**

Project No: 679993.03.35.44  
Document Title: Water System Capacity Expansion Plan Preliminary Program Management Plan  
Document No.: BI0926181102SYR  
Revision: 1 – December 2018 Update  
Date: October 2018  
Client Name: Mohawk Valley Water Authority  
Project Manager: Zachary Monge, P.E.

Jacobs Engineering Group Inc.

430 East Genesee Street  
Suite 203  
Syracuse, NY 13202  
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**Document History and Status**

Revision	Date	Description	By	Review	Approved
0	12/2013	Preliminary Program Management Plan	CH2M HILL	N/A	N/A

## Executive Summary

The Mohawk Valley Water Authority (MVWA) is in the process of implementing a Water System Capacity Expansion Plan (WSCEP) to accommodate private development at the Marcy Nanocenter near the SUNY/IT campus. The planned expansion will increase MVWA's system capacity from 32 MGD to 48.5 MGD and includes raw water conveyance improvements, a water treatment plant (WTP) expansion, and additional water storage facilities at the Toby Road and Cavanaugh Road (Marcy Reservoir) tank sites. MVWA retained Jacobs to update the preliminary Program Management Plan drafted in 2013 to coordinate the delivery of this work.

After review and analysis of MVWA's water system, planned expansion and previously conducted capacity and plant upgrade studies, Jacobs recommends a basic construction sequence of designing and constructing the raw water main improvements and additional Toby and Cavanaugh tanks first. This approach builds additional reliability into the Water System prior to the Hinckley plant expansion. After an evaluation of critical milestones and schedule for the implementation of the projects, Jacobs foresees no added benefit to pursuing an EPC or design-build delivery model for these projects and recommends a design-bid-build approach to MVWA's WSCEP.

Included in this report is a detailed layout of the salient aspects of a Program to deliver this work. In accordance with this Program, Jacobs further recommends that MVWA undertake the following actions:

1. Retain the services of a Professional Program Manager (PPM). It is important to engage a Program Manager as early as possible in the planning process in order for subsequent work to be effectively coordinated.
2. Solicit and retain professional engineering services for the finished water transmission mains to Cavanaugh Road, Toby Road, and to the Marcy Nanotech site. Begin route studies to support any necessary easement acquisitions.
3. Solicit and retain professional engineering services for the Cavanaugh Road and Toby Road tank expansions when appropriate considering the overall schedule and potential funding opportunities through New York State.
4. Solicit and retain professional engineering services for the Hinckley WTP expansion when appropriate considering the overall schedule and potential funding opportunities through New York State. Begin route studies to support environmental permitting, necessary easement acquisition, and coordination with NYPA and Brookfield Power.
5. Continue to investigate long-term funding and grant opportunities through New York State for progressing the WSCEP into the design and construction phases.

**APPENDIX B**  
**MVWA RULES AND REGULATIONS DETAILS**

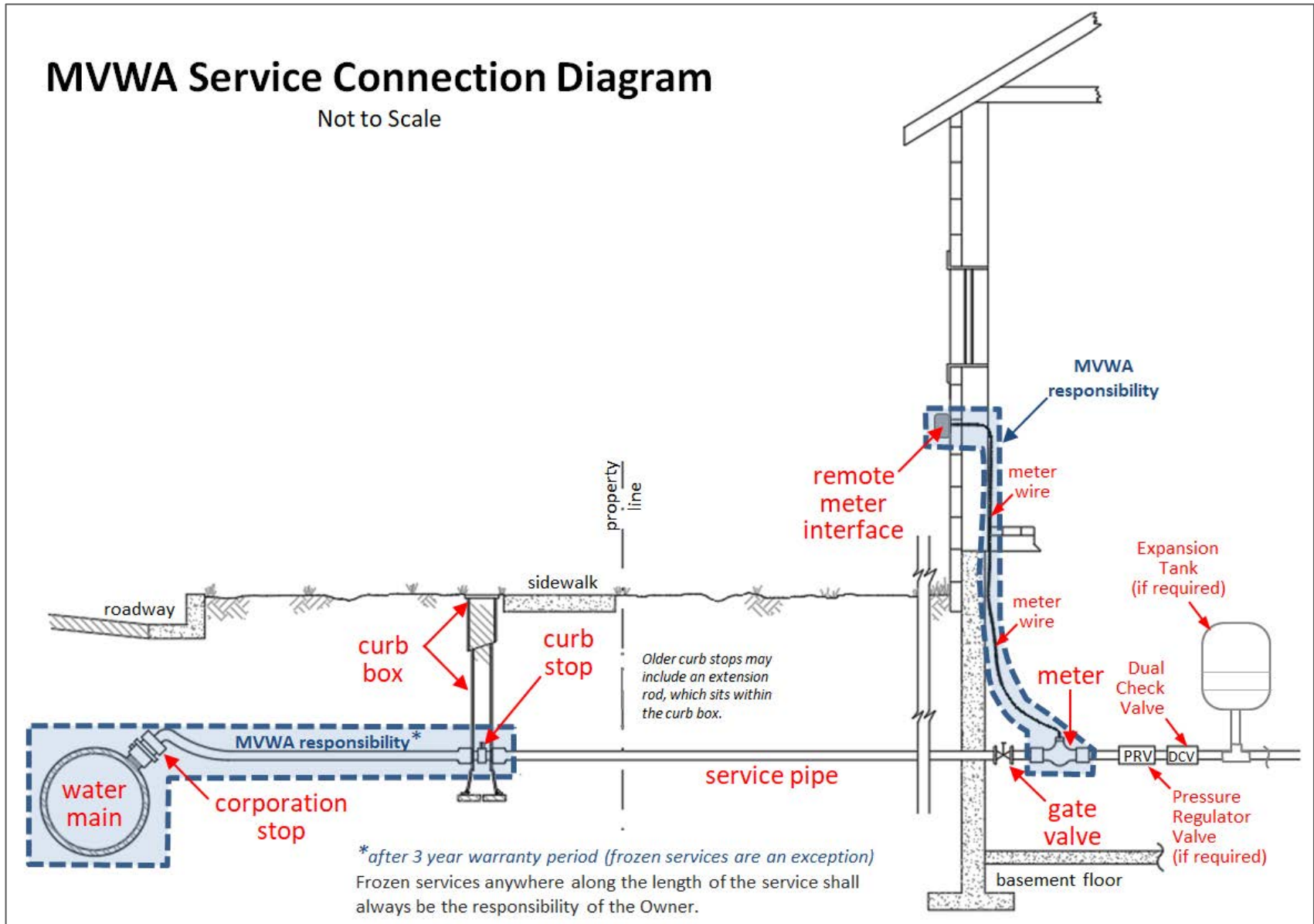
**FIGURE 1.1**  
**MVWA Service Connection Diagram**



Figure 3.1 - MVWA Service Connection Diagram

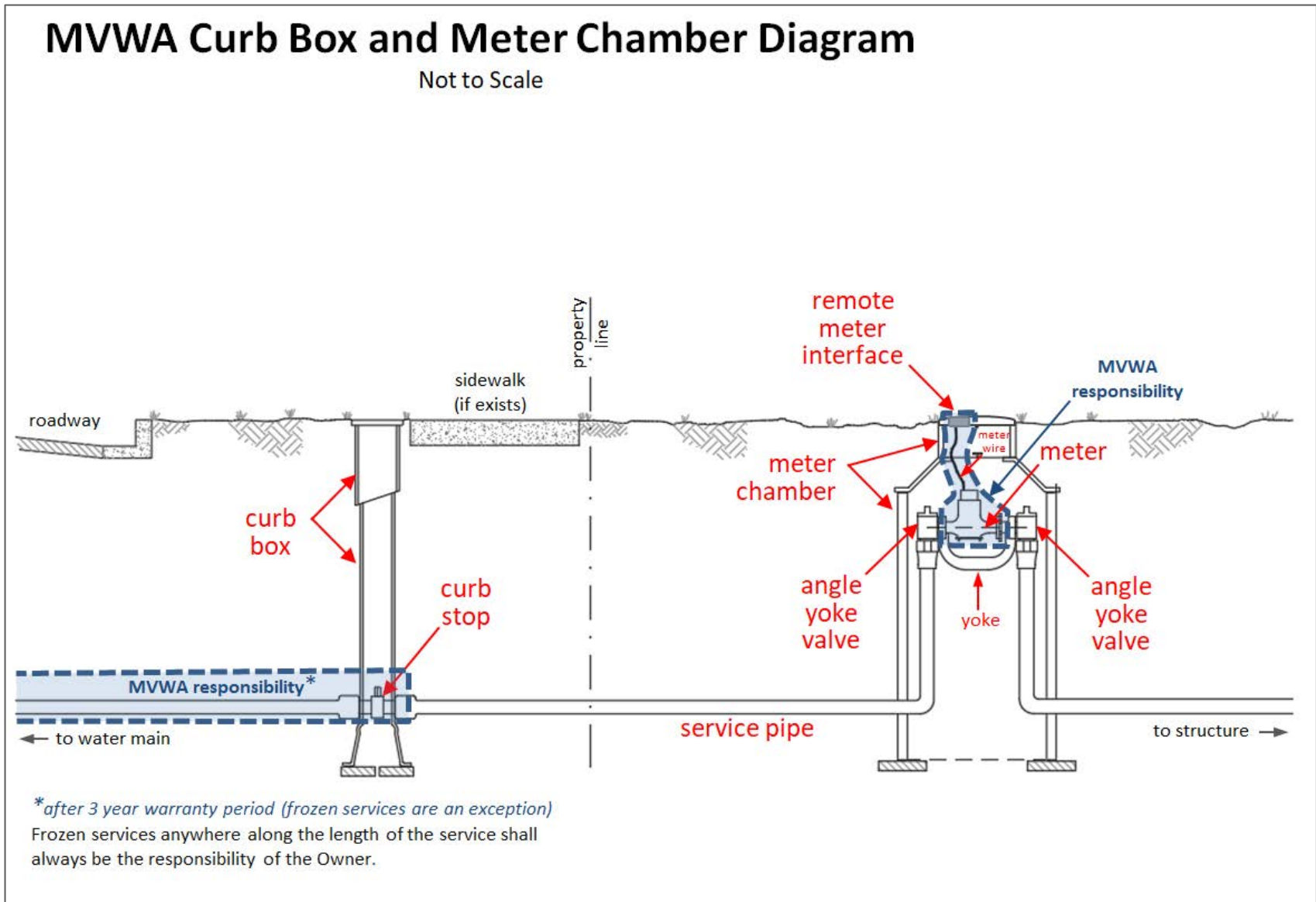
# MVWA Service Connection Diagram

Not to Scale

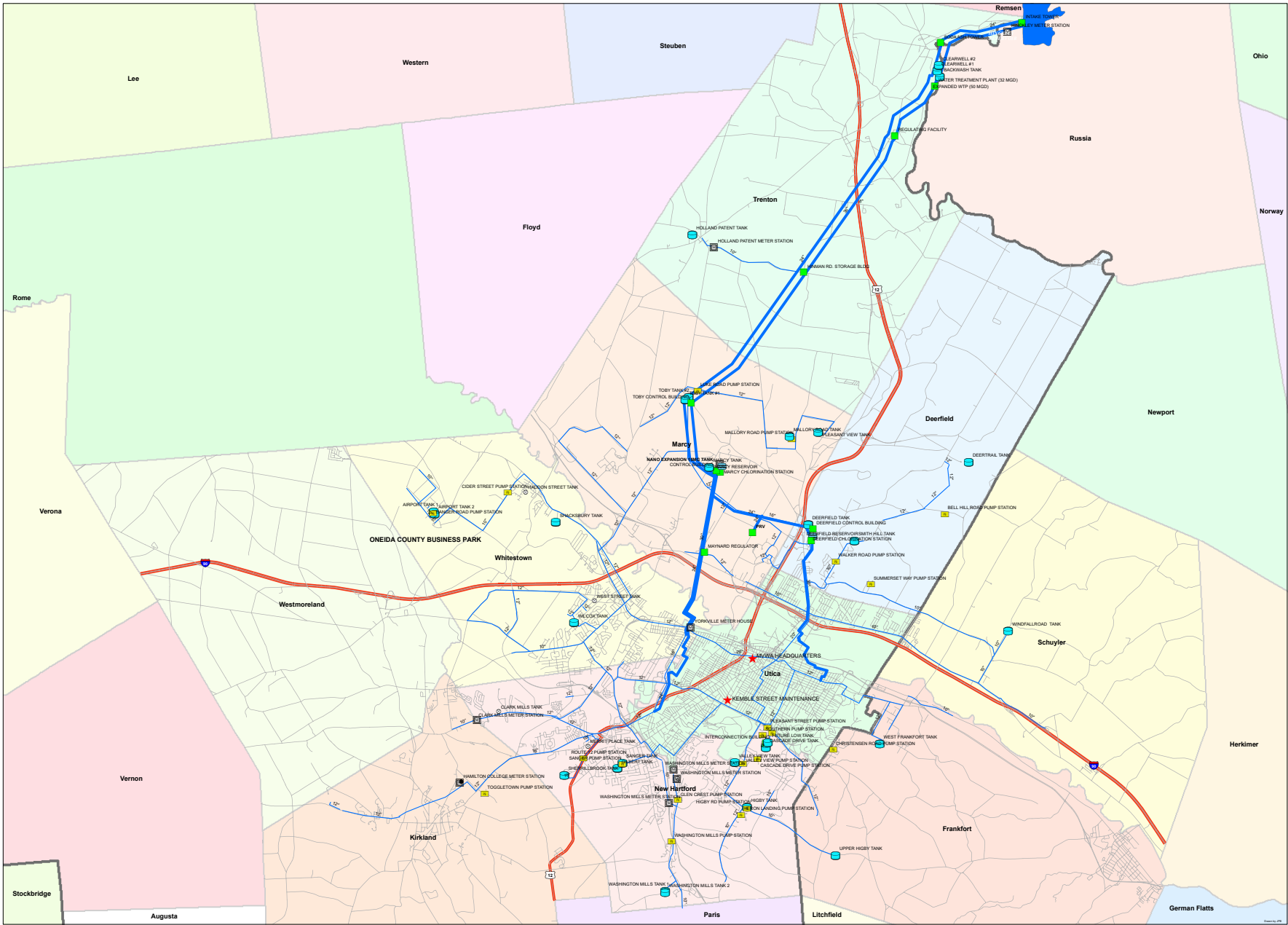


**FIGURE 1.2**  
**MVWA Service Curb Box Meter Chamber Diagram**

Figure 3.2 - MVWA Curb Box and Meter Chamber Diagram



**APPENDIX C**  
**PRIMARY SYSTEM COMPONENTS**



# MOHAWK VALLEY WATER AUTHORITY PRIMARY SYSTEM COMPONENTS

- Legend**
- Facilities**
- Demo
  - Meter Stations
  - Other Facility
  - Pump Stations
  - Reservoir
  - Tanks
- Main Size**
- 10 - 20
  - 24 - 36
  - Local Road
  - State / Major Road

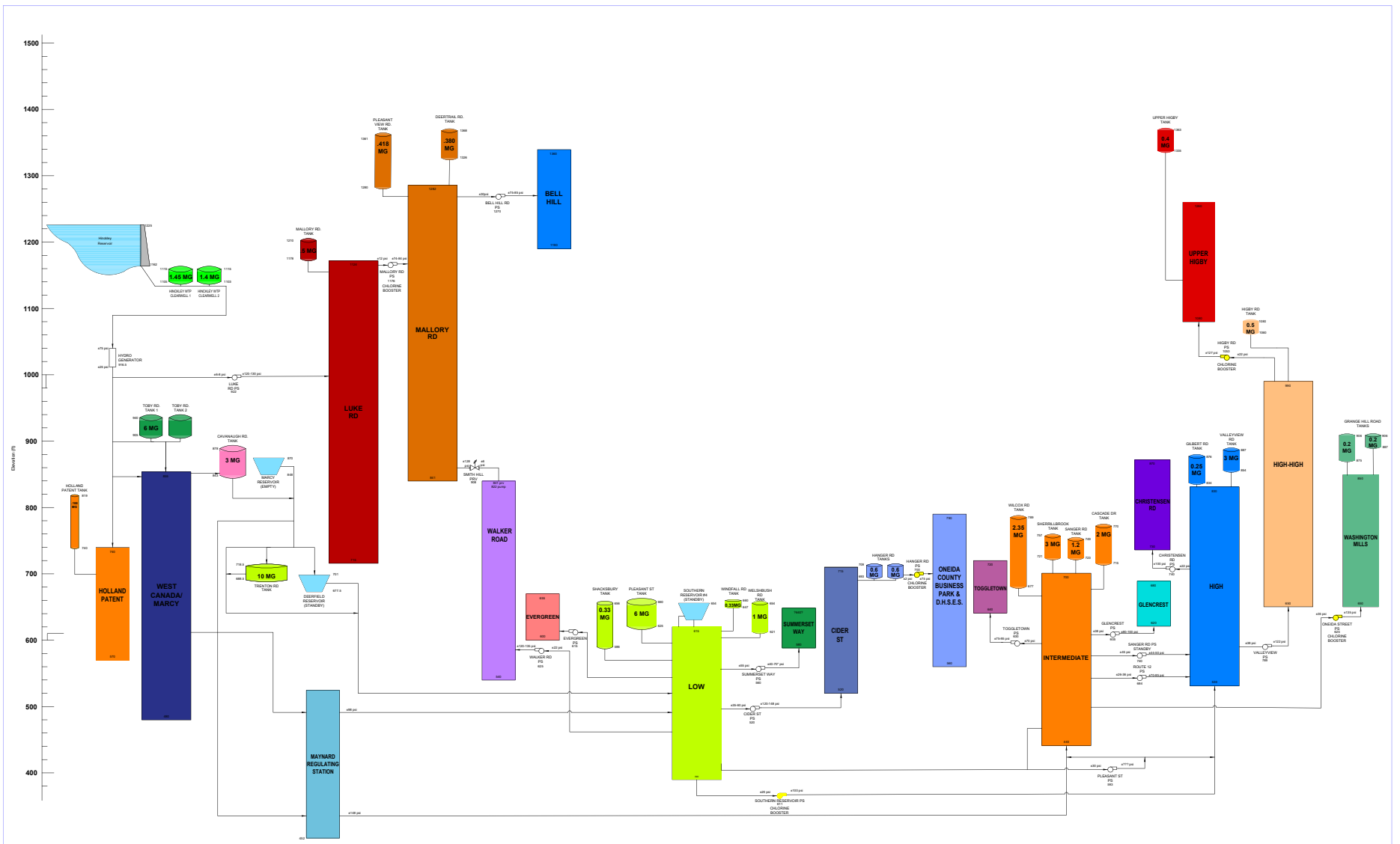
October 2012

DRAFT

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Miles

Document Path: Y:\mva\_data\Facilities\System Components\PrimarySystem\MVWA Primary System Comp all mains.mxd

**APPENDIX D**  
**HYDRAULIC PROFILE**



NOTES:  
 1. SERVICE ZONE MAX. ELEVATION IS BASED ON LOW TANK LEVELS AND MINIMUM SYSTEM PRESSURE OF 25 PSI.  
 2. TANK LEVELS ARE BASED ON SCADA TRENDS.

NOT TO SCALE



# MVWA HYDRAULIC SCHEMATIC

DRAWN BY: J. BERNARCIK	
DATE: JANUARY 2019	DWG. NUMBER:

*The experience to*  
**listen**  
*The power to*  
**solve**<sup>SM</sup>

**Barton**  
**&Loguidice**

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**Report of Rate Consultant**

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# Amawalk Consulting Group LLC

90 BROAD STREET, SUITE 707A, NEW YORK, NY 10004 • TEL: 212.361.0050 • FAX: 212.361.0055

February 13, 2023

Chairman and Members  
Mohawk Valley Water Authority  
City Hall  
Utica, New York 13502

Chairman and Members  
Upper Mohawk Valley Regional Water Finance Authority  
City Hall  
Utica, New York 13502

Re: Upper Mohawk Valley Regional Water Finance Authority  
Water System Revenue Bonds, Series 2023 (Green Bonds)

Dear Chairmen and Members:

We are submitting herewith our Report of the Rate Consultant (the “Report”) prepared in connection with the issuance of \$9,400,000<sup>1</sup> in Water System Revenue Bonds, Series 2023 (Green Bonds) (the “Series 2023 Bonds”), by the Upper Mohawk Valley Regional Water Finance Authority (the “Finance Authority”). Proceeds from the Series 2023 Bonds are to be used to: 1) finance the 2023 Project, and 2) pay the costs of issuance of the Series 2023 Bonds. The 2023 Project to be funded with Series 2023 Bonds include treatment facility improvements, pump station improvements, reservoir improvements, storage tank improvements, metering & regulating station improvements, transmission and distribution main improvements, and other miscellaneous projects.

The purpose of the Report is to present the results of our independent analysis of the forecasted cash flows of the Finance Authority and the Mohawk Valley Water Authority (the “MVWA” or the “Authority”) for the fiscal years ending December 31, 2022 through December 31, 2027 (the “Reporting Period”). The forecast includes provisions for the financing of improvements to the Regional System (defined herein) as reflected in the Capital Improvement Program (the “CIP”). The forecasted cash flows set forth the ability of the MVWA to meet the operating costs, working capital needs and other financial requirements, including the debt service associated with the Series 2023 Bonds, the outstanding bonds and additional bonds that may be issued by the Finance Authority during the Reporting Period.

The moneys pledged to secure the bonds of the Finance Authority are to be derived from the following sources: (i) all right, title and interest of the Finance Authority in and to the Revenues as

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<sup>1</sup> Preliminary, subject to change

Chairmen and Members  
Mohawk Valley Water Authority  
Upper Mohawk Valley Regional Water Finance Authority

defined in the General Revenue Bond Resolution (the “Resolution”), (ii) all moneys or securities in any of the funds or accounts established under the Resolution (other than the Rebate Fund and any fund permitted to be created free and clear of the Lien of the Resolution), (iii) all right, title and interest of the Finance Authority in and to the Financing Agreement, and (iv) all rights and privileges of every kind and nature appurtenant to, all proceeds of, and all right, title and claim which the Finance Authority now or may hereafter acquire in, the aforesaid property, subject only to the provisions of the Resolution, the Act and the Financing Agreement relating to the use and application thereof. The term “Revenues” as defined by the Resolution, shall mean rates, fees, charges and other income and receipts derived from the operation of the Regional System including, without limiting the generality of the foregoing, investment proceeds and proceeds of insurance, condemnation, and sale or other disposition of assets, together with all federal, State or municipal aid, if any.

The Report summarizes the anticipated financial operations of the MVWA and the Finance Authority for the Reporting Period. We have reviewed, to the extent practicable, the books, records, financial reports and statistical data of the MVWA and the Finance Authority as necessary to assemble the forecast of revenues, revenue requirements, and debt service coverage. We have performed analyses to support our findings and conclusions.

The operating capabilities of the Regional System and proposed improvements and additions under the CIP were independently evaluated and confirmed by Barton & Loguidice, D.P.C. (“B&L”) in a separate “Engineering Report Regarding Regional Water Financing Water System Revenue Bonds Series 2023”, hereinafter the “B&L 2023 Engineering Report”. The forecasted cash flows contained in our Report rely upon the conclusions of B&L regarding the funds required for capital improvements and operation and maintenance during the Reporting Period to maintain the Regional System in good working order.

Based upon our analyses, we offer the following opinions and conclusions:

1. It is our opinion that Revenues (including projected revenue increases resulting from anticipated future rate increases to be implemented by the MVWA), as set forth in the forecasted cash flows, are currently and will be sufficient to meet the following requirements during the Reporting Period:
  - a. One hundred percent (100%) of all expenses of operation, maintenance, and repair of the Regional System;
  - b. One hundred and fifteen percent (115%) of the principal of and interest on all bonds issued under the Resolution, as the same shall become due and payable;
  - c. One hundred percent (100%) of the required annual payments to the City of Utica under the Promissory Note; and

February 13, 2023

Chairmen and Members  
Mohawk Valley Water Authority  
Upper Mohawk Valley Regional Water Finance Authority

- d. One hundred percent (100%) of other Required Deposits as required by the Resolution.
2. In the analysis of the forecast of future operations summarized in this Report, the Amawalk Consulting Group LLC has reviewed certain financial and operational assumptions with respect to conditions, events and circumstances which may occur in the future. We believe that these assumptions are reasonable and attainable, although actual results may differ from those forecast as influenced by the conditions, events and circumstances which actually occur.
3. In our opinion, the water rates, fees, and charges of the MVWA, including projected increases, compare favorably to the rates, fees, and charges of other water utilities and are reasonable.

We appreciate the opportunity to be of service to the Finance Authority and the MVWA in this important matter.

Very truly yours,



Shan Lin  
**Amawalk Consulting Group LLC**

## INTRODUCTION

### **Purpose**

The purpose of this Report of the Rate Consultant (the “Report”) is to summarize and present the findings of the Amawalk Consulting Group LLC (“Amawalk”) for the Mohawk Valley Water Authority (the “MVWA” or the “Authority”) and the Upper Mohawk Valley Regional Water Finance Authority (the “Finance Authority”) in connection with the issuance of the Finance Authority’s Water System Revenue Bonds, Series 2023 (Green Bonds) (the “Series 2023 Bonds”).

### **Scope**

This Report summarizes the historical and projected financial operations of the water system owned and operated by the MVWA (the “Regional System”). We have reviewed, to the extent practicable, the books, records, financial reports and statistical data of the MVWA and the Finance Authority. We have analyzed the projected revenues, revenue requirements, and debt service coverage for the six year period of fiscal years 2022 through 2027, as defined herein. The fiscal years of the MVWA and the Authority are consistent with the calendar year, beginning on January 1 and ending on December 31. Projected revenues, expenses, debt service and debt service coverage are presented on a cash basis.

### **Amawalk Qualifications**

Amawalk provides financial and management consulting services to water, wastewater and stormwater utilities, local governments and other organizations including the New York City Water Board, New York City Municipal Water Finance Authority, Boston Water and Sewer Commission, District of Columbia Water and Sewer Authority, the Philadelphia Water, Sewer and Storm Water Rate Board, the Portland (OR) Water Bureau, and the Monroe County Water Authority (Rochester, NY).

### **Organization and Management**

The MVWA and the Finance Authority coordinate, manage, and control the activities of the Regional System. These entities are briefly described herein for informational purposes. Additional information concerning the MVWA and the Finance Authority is contained in the Official Statement for the Series 2023 Bonds.

The Finance Authority is a legal entity created by an act of the state legislature in 1994 with the power to borrow money, issue debt, and enter into other obligations for the purpose of maintaining and improving the Regional System. The Finance Authority entered into agreements requiring the MVWA to fix rates sufficient to pay the costs of operating and financing improvements to the Regional System and to require the MVWA to adequately maintain the Regional System.

The Upper Mohawk Valley Regional Water Board (the “Board”) is a separate legal entity that was also created by act of the state legislature in 1994. The Board is authorized to fix and collect rates, fees, and charges adequate to pay the costs of the Regional System. The responsibility for operating, maintaining and improving the Regional System lies with the Board. The Board filed and subsequently received a “Certificate of Amendment of Assumed Name” on October 23, 2002, from the State of New York’s Department of State, Division of Corporations, changing the name of

the public benefit corporation from the Upper Mohawk Valley Regional Water Board to the Mohawk Valley Water Authority (the “MVWA”).

### **Customer Base – Service Area**

The Regional System currently serves the eastern portion of Oneida County (the “County”), including the City of Utica, parts of the Towns of Deerfield, Kirkland, Marcy, New Hartford, Trenton, Whitestown, and Westmoreland (the “Towns”) and six Villages in the County. Service is also provided to portions of the Town of Frankfort and the Town of Schuyler in Herkimer County. The Regional System also serves the State University of New York Institute of Technology at Utica/Rome, Hamilton College and the State of New York Midstate Correctional Facility.

### **COVID-19 and Its Impacts on the Service Area**

The novel strain of coronavirus, called COVID-19, continues to impose negative impacts throughout the world, including within the MVWA service area. The impacts to date on Authority expenses have been minimal. Potential impacts to MVWA’s cash receipts associated with the COVID-19 outbreak include: a delay in payments by certain customers for economic, health or other reasons; a net reduction in metered billing for customers (reflecting a decrease in non-residential use); and suspensions or delays in the use of penalties or other enforcement techniques on late payment and nonpayment. There are no assurances that COVID-19 and its resulting economic disruption will not result in Revenues during the Reporting Period that are lower than currently expected. The MVWA practice of maintaining a relatively strong operating cash balance helps mitigate financial risks related to COVID-19 or other circumstances that may arise. The impacts of COVID-19 on the MVWA are discussed later in this Report.

## **HISTORICAL FINANCIAL PERFORMANCE**

The following parts of the Report present information regarding the customer base, including the number of meters in service, the largest users of water and the demand for water. These are followed by summaries of the historical revenues, water rates and expenses of the Regional System.

### **Customer Base – Number of Accounts**

The MVWA provides retail service to over 39,000 metered accounts. As shown in Table 1 below, the number of meters in the Regional System increased from 39,204 as of December 31, 2017 to 39,576 as of December 31, 2021, an average annual rate of increase of 0.24%. As of December 31, 2021, there are about 19,193 meters, or 48% of the total, located in the City of Utica (the “City”). As of November 30, 2022, there were 39,634 active meters in the Regional System; again a slight increase over the end of the previous year. The number of meters as of December 31, 2022 was not available as of the date of this Report.

**Table 1**  
**MOHAWK VALLEY WATER AUTHORITY**  
**Number of Active Meters**

<b>Meter Size</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
5/8"	36,834	36,944	36,981	37,021	37,107
3/4"	571	572	582	578	586
1"	519	530	517	514	517
1 1/2"	253	264	286	282	282
2"	208	206	209	208	212
3"	64	70	69	70	71
4"	49	50	51	46	47
6"	24	23	23	21	21
Combined	67	72	79	81	87
Fire	615	634	656	644	646
<b>Total</b>	<b>39,204</b>	<b>39,365</b>	<b>39,453</b>	<b>39,465</b>	<b>39,576</b>

Source: MVWA

**Customer Base – Revenues**

The customer base of the MVWA is well-diversified. In 2021, the Midstate Correctional Facility was the largest customer based on both annual water consumption and billings; annual revenues were approximately 2.5% of all user charge revenues. The annual revenues from the next nineteen (19) largest monthly billed customer accounts represented, in aggregate, about 9.4% of total user charge revenues. Table 2 summarizes the annual consumption and billing for the twenty largest monthly billed customer accounts for 2021.

The results for the full year of 2022 were not available as of the date of this Report. See **Projected Customer Demand** in this Report for additional information.



**Table 2**  
**MOHAWK VALLEY WATER AUTHORITY**  
**20 Largest Monthly Billed Customers**  
**Twelve Months Ending December 31, 2021**

Usage Rank	Customer	Annual Consumption in Cubic Feet	Annual Consumption in Gallons	Annual Billings
1	Midstate Correctional Facility	22,492,100	168,252,604	554,211
2	Matt Brewing Company, Inc.	13,678,700	102,323,789	346,651
3	St. Luke's Hospital	13,310,200	99,567,217	339,466
4	Oneida County Sewer District	9,279,300	69,413,989	235,915
5	Hamilton College	7,613,500	56,952,939	190,397
6	Marcy Correctional	5,437,100	40,672,335	141,608
7	Masonic Home	3,142,600	23,508,282	74,213
8	Municipal Housing (Tilden Ave location)	2,714,900	20,308,864	84,218
9	Con Med Corporation	2,628,500	19,662,547	71,025
10	St. Elizabeth Hospital	2,613,300	19,548,843	82,556
11	Weston Foods	2,370,300	17,731,077	62,710
12	Exyte Cree Building	2,153,900	16,112,292	71,578
13	Six Nations Apartments (formerly Intercoastal Prop.)	1,948,000	14,572,053	53,802
14	Wal-Mart Distribution Center	1,871,000	13,996,053	58,244
15	Adirondack Ridge Mobile Home Park	1,868,500	13,977,352	51,885
16	2200 Bleecker St Properties	1,790,400	13,393,123	54,819
17	Utica College	1,661,500	12,428,884	52,713
18	Kennedy Plaza Apartments	1,601,300	11,978,557	46,445
19	Faxton Hospital	1,582,900	11,840,915	54,237
20	Office of Mental Health BSC-41534	1,408,900	10,539,305	42,988
<b>TOTALS - 12 Months as of December 31, 2021</b>		<b>101,166,900</b>	<b>756,781,019</b>	<b>\$ 2,669,681</b>

Source: MVWA

### Historical Customer Demand and Billings

The frequency of customer billing depends on the class and size of the customer. All but a limited number of water customers are billed quarterly. Quarterly billing customers are predominantly residential and small commercial properties and account for about 73% of water service billings. The remaining customers, generally large non-residential users, are billed monthly.

Table 3 illustrates recent water consumption by customer class in hundreds of cubic feet ("ccf") per year. Water consumption has been affected by a long-term trend of declining commercial/industrial use, conservation by residential customers, year-to-year fluctuations due to weather and other factors such as the gradual replacement of old water fixtures and appliances with more efficient units. Long-term declines in water demand are common among water utilities in the northeast United States. From 2017 through 2021, annual customer demand declined at an average rate of 1.0% per year. The pace of decline was not uniform as evidenced by the increase in total usage in 2018 and in 2021.

**Table 3**  
**MOHAWK VALLEY WATER AUTHORITY**  
**Water Consumption by Customer Class (ccf)**  
**2017 through 2021**

<b>Classification</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Avg. Annual % Change (2017-2021)</b>
Quarterly Billing	3,090,111	3,243,980	3,058,191	3,024,163	2,972,175	-1.0%
Monthly Billing	1,538,537	1,474,942	1,487,711	1,360,825	1,477,208	-1.0%
<b>Total</b>	<b>4,628,648</b>	<b>4,718,922</b>	<b>4,545,902</b>	<b>4,384,988</b>	<b>4,449,383</b>	<b>-1.0%</b>

Notes:

1. Source of data: records of the MVWA.
2. All years reflect fiscal years ending December 31.

The full-year consumption, customer billings and cash receipts for 2022 were not available as of the date of this Report. As of November 30, 2022, total consumption for the year-to-date was 4,324,409 ccf, which represents a 6.1% increase over the same period for the prior year. In 2021, the Wolfspeed chip manufacturing facility (hereinafter described) began using water from the Regional System; production began in 2022. See **Projected Customer Demand** for additional information.

Table 4 shows the annual billings for quarterly and monthly customers for 2017 through 2021. The trend in billings for quarterly and monthly customers differs from the trend in consumption; i.e., billings for quarterly customers have been increasing at a slightly higher annual rate than for monthly customers. Rate increases enacted by the MVWA more than offset the effects on billings of the trend of declining usage. In addition, the MVWA utilizes a multi-tier rate structure (hereinafter defined); changes in customer consumption and resulting billings may not occur evenly across each tier. As of November 30, 2022, total year-to-date customer billings were \$22.4 million, which represents a 6.1% increase over the same period for the prior year.

**Table 4**  
**MOHAWK VALLEY WATER AUTHORITY**  
**Annual Water Billings by Customer Class (\$)**  
**2017 through 2021**

<b>Classification</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Avg. Annual % Change (2017-2021)</b>
Quarterly Billing	15,294,065	16,261,086	16,232,878	16,714,945	16,859,859	2.5%
Monthly Billing	5,743,392	5,846,737	6,031,012	5,836,327	6,233,468	2.1%
<b>Total</b>	<b>21,037,457</b>	<b>22,107,823</b>	<b>22,263,890</b>	<b>22,551,272</b>	<b>23,093,327</b>	<b>2.4%</b>

Notes:

1. Source of data: records of the MVWA.
2. The annual billings and the average annual percentage change include the effects of rate increases averaging 1.5% in 2017, 3.77% in 2018, 2.0% in 2019, 2.5% in 2020, and 2.0% in 2021.
3. Annual billings are for fixed and water consumption-based charges and do not include delinquency charges, miscellaneous fees or billings for other services.
4. All years reflect fiscal years ending December 31.

## Historical Cash Receipts

The MVWA has used and continues to use a water rate schedule that provides for a fixed charge per billing period which varies by meter size, and a water consumption-based charge. Such a structure is common within the water industry. The unit rate for consumption-based charges declines at certain levels of increased water use. There is a minimum customer charge which varies by meter size.

Table 5 illustrates collections from customers for user charges for water service by month for 2017 through 2021 on a cash basis. The results shown in Table 5 are dependent upon both the customer billings as well as the rate of bill collection by the MVWA. Annual collection rates during this period, or ratios of total receipts over total billings, as reported by the MVWA have ranged from 97.9% to 102.5%. Table 6 illustrates recent collections on a cash basis from other sources of revenue including interest on late payments, billing and collection fees, laboratory fees and grants, interest income on available funds, hydroelectric revenue and receipts from other miscellaneous fees and charges. Table 6 also illustrates total cash receipts from all sources for 2017 through 2021.

**Table 5**  
**MOHAWK VALLEY WATER AUTHORITY**  
**Cash Collections - User Charges (\$)**  
**2017 through 2021**

	2017	2018	2019	2020	2021
January	1,536,435	1,508,647	1,628,783	1,512,149	1,421,235
February	1,647,163	1,557,427	1,674,442	1,808,952	1,792,928
March	1,992,799	2,282,213	1,950,530	2,060,475	2,150,217
April	1,612,246	1,727,127	1,736,697	1,390,919	1,695,937
May	1,664,563	1,618,257	1,722,290	1,702,717	1,726,661
June	1,606,201	1,808,891	1,839,069	2,059,450	2,061,323
July	1,866,900	1,773,873	1,924,664	1,801,574	1,824,877
August	1,827,330	2,022,548	1,883,193	1,677,717	1,988,803
September	1,437,712	1,987,505	1,764,576	1,952,613	1,925,612
October	2,330,605	2,153,825	2,203,398	2,145,684	2,020,793
November	1,397,343	1,585,704	1,713,917	1,582,841	1,677,211
December	1,996,546	2,042,842	1,902,937	1,989,000	2,266,243
<b>Total</b>	<b>20,915,842</b>	<b>22,068,861</b>	<b>21,944,496</b>	<b>21,684,089</b>	<b>22,551,840</b>

**Notes:**

1. Source: records of the MVWA.
2. Cash collections from user charges exclude the interest on late payments and other operating revenue as listed in Table 6.
3. All years reflect fiscal years ending December 31.

**Table 6**  
**MOHAWK VALLEY WATER AUTHORITY**  
**Cash Receipts from Other Charges, Services and Interest Income &**  
**Total Cash Receipts (\$)**  
**2017 through 2021**

	2017	2018	2019	2020	2021
Interest on Late Payments	415,369	468,272	428,480	152,221	292,256
Unpaid Bill Fee	257,551	273,146	258,072	106,761	115,127
Improper Backflow Charges	135,985	139,253	260,368	263,884	253,060
Village Delinquent Water	28,378	21,889	27,618	27,765	12,328
City Delinquent Water	288,675	250,510	226,658	298,425	483,390
County Delinquent Water	81,345	58,239	82,139	105,244	191,235
Billing and Collection Fees	148,500	263,053	295,663	295,281	296,904
Laboratory Fees and Grants	448,486	238,078	260,808	283,112	276,424
Hydroelectric Power Revenue	51,573	62,430	52,764	40,255	55,409
Investment Interest	6,893	5,589	19,278	14,119	11,184
Refunds - Workman's Comp & Health Insurance	0	489,922	27,548	8,320	47,765
Miscellaneous Revenue	710,137	455,063	509,553	492,899	577,397
<b>Total Receipts from Other Charges, Services &amp; Interest</b>	<b>2,572,892</b>	<b>2,725,444</b>	<b>2,448,950</b>	<b>2,088,286</b>	<b>2,612,478</b>
<b>Cash Collections - User Charges (Table 5)</b>	<b>20,915,842</b>	<b>22,068,861</b>	<b>21,944,496</b>	<b>21,684,089</b>	<b>22,551,840</b>
<b>Total Cash Receipts</b>	<b>23,488,734</b>	<b>24,794,305</b>	<b>24,393,446</b>	<b>23,772,375</b>	<b>25,164,318</b>

**Notes:**

1. Source: records of the MVWA.
2. All years reflect fiscal years ending December 31.

Customers that are late in paying their bills are assessed a late penalty (15% of the outstanding balance for the most current bill), as well as a flat fee if the bill is unpaid greater than 50 days, and an overdue charge of 1.5% per month for bills that are unpaid after seven months.

The MVWA bills customers for the water services that it provides and also bills City sewer charges and County sewer charges. It also prepares and issues bills on behalf of a number of municipalities (Marcy, Westmoreland, Holland Patent, Strawberry Hills, Oriskany, Yorkville and Bridgewater). The MVWA collects customer payments for both water services and sewer services. Amounts collected for sewer services are paid to the respective jurisdictions, as appropriate. In the event that a customer makes a partial payment, it is the policy of the MVWA to satisfy the outstanding water charges first before allocating funds to the sewer charges. The forecasted cash flows reflect the expected continuation of this method of applying payments. The City, County, and other municipalities pay the MVWA for sewer billing and collection services. Such payments represent negotiated amounts which may be subject to adjustment in the future.

**Historical Rate Increases**

Table 7 provides a summary of the historical increases in rates for water service beginning with 2014. The nine month period in 2014 (April 1, 2014 to December 31, 2014) reflects the transition from a fiscal year ending March 31 (which was used in years prior to and through March 31, 2014) to a fiscal year ending December 31. The change in water rates from 2014 to 2023 represents an average increase of about 2.7% per year on a compounded basis. The percentage increases in rates in recent years reflect the relative stability of the cash flow needs of the Regional System during this period.

**Table 7**  
**MOHAWK VALLEY WATER AUTHORITY**  
**Historical Increases in Water Rates for the Regional System**

<u>Year</u>	<u>Increase from Prior Year</u>
2014	1.90%
9 Month 2014	2.90%
2015	2.80%
2016	2.00%
2017	1.50%
2018	3.77%
2019	2.00%
2020	2.50%
2021	2.00%
2022	2.50%
2023	4.85%

Aggregate % Increase in Water Rates, 2014 to 2023: 29.3%  
Average Annual Increase in Water Rates, 2014 to 2023: 2.7%

Notes:

1. Source: MVWA.
2. For 2014, the annual period reflects the fiscal year ending March 31.
3. The 9 Month 2014 represents the period of April 1, 2014 through December 31, 2014.
4. Starting with 2015, reflects the fiscal years ending December 31.

**Historical Operation and Maintenance Expenses**

Table 8 identifies the operation and maintenance expenses of the Regional System for 2017 through 2021 on an accrual basis. The average annual rate of increase in operation and maintenance expenses prior to the payments in lieu of taxes ("PILOT") is 0.62%. It is noted, however, that annual changes in expenses during the 5-year period have not been uniform, with total expenses ranging from a low of \$13.2 million in 2018 to a high of \$15.8 million in 2020.

Expenses are presented for both Personnel Services ("PS") and Other Than Personnel Services ("OTPS"). PS expenses include all salary and wage costs together with the costs of all benefits including health care and pension contributions. Effective August 1, 2017, the MVWA contracted with SUEZ North America ("SUEZ") for a five-year period to operate, manage and maintain the Authority's water treatment plant. As a result, only OTPS expenses are shown for water treatment starting in 2018. The MVWA owns the Regional System, including the water treatment plant, and operates, manages and maintains all other assets of the System. During the initial five-year period, SUEZ was acquired by Veolia North America ("VEOLIA") which continues to operate and maintain the water treatment plant under terms similar to the previous agreement.

PILOT payments in 2017 through 2021 were made pursuant to authorizing legislation (see the Official Statement for the Series 2023 Bonds for additional information).

**Table 8**  
**MOHAWK VALLEY WATER AUTHORITY**  
**Historical Operation and Maintenance Expenses (\$)**  
**2017 through 2021**

Description	2017			2018			2019		
	Total	Personnel Services	OTPS	Total	Personnel Services	OTPS	Total	Personnel Services	OTPS
Administration	550,477	393,450	157,027	580,661	395,456	185,205	590,714	469,213	121,501
Human Resources and Safety	256,146	240,724	15,422	428,679	342,257	86,422	510,437	312,173	198,264
Finance and Accounting	816,840	519,011	297,829	706,007	437,285	268,722	710,612	424,645	285,967
Customer Service	414,480	414,175	305	420,168	413,999	6,169	424,990	421,247	3,743
Engineering	619,566	512,347	107,219	625,063	533,204	91,859	693,149	571,834	121,315
Water Distribution	430,114	307,085	123,029	441,897	293,511	148,386	435,843	329,796	106,047
Information Technology	687,060	372,281	314,779	583,521	341,450	242,071	802,735	436,495	366,240
Water Quality	687,153	535,890	151,263	671,355	502,445	168,910	703,177	560,606	142,571
Treatment Plant	3,453,960	486,917	2,967,043	2,726,415	-	2,726,415	3,035,322	-	3,035,322
Maintenance	5,016,756	2,845,285	2,171,471	4,677,881	2,963,904	1,713,977	5,148,208	3,288,780	1,859,428
General Services w/o PILOT	1,091,024	-	1,091,024	1,132,308	-	1,132,308	1,122,822	20,982	1,101,840
Benefits - Retirees	433,142	433,142	-	238,954	238,954	-	256,323	256,323	-
Authority Operations	18,383	-	18,383	16,800	-	16,800	20,613	-	20,613
<b>Subtotal</b>	<b>14,475,101</b>	<b>7,060,307</b>	<b>7,414,794</b>	<b>13,249,709</b>	<b>6,462,465</b>	<b>6,787,244</b>	<b>14,454,945</b>	<b>7,092,094</b>	<b>7,362,851</b>
Payments in Lieu of Taxes (PILOT)	1,378,771	-	1,378,771	1,318,424	-	1,318,424	1,275,610	-	1,275,610
<b>Total O&amp;M Expenses</b>	<b>15,853,872</b>	<b>7,060,307</b>	<b>8,793,565</b>	<b>14,568,133</b>	<b>6,462,465</b>	<b>8,105,668</b>	<b>15,730,555</b>	<b>7,092,094</b>	<b>8,638,461</b>

Description	2020			2021		
	Total	Personnel Services	OTPS	Total	Personnel Services	OTPS
Administration	634,022	500,236	133,786	549,462	421,458	128,004
Human Resources and Safety	623,085	370,285	252,800	380,848	278,523	102,325
Finance and Accounting	729,167	412,031	317,136	705,986	368,171	337,815
Customer Service	493,510	491,884	1,626	443,380	441,937	1,443
Engineering	671,938	621,485	50,453	656,858	577,383	79,475
Water Distribution	469,012	381,518	87,494	579,212	443,056	136,156
Information Technology	931,934	531,818	400,116	802,559	409,639	392,920
Water Quality	731,520	604,540	126,980	666,682	549,959	116,723
Treatment Plant	3,215,989	-	3,215,989	3,184,731	-	3,184,731
Maintenance	5,886,260	3,644,214	2,242,046	5,460,871	3,186,890	2,273,981
General Services w/o PILOT	1,352,027	-	1,352,027	1,368,803	-	1,368,803
Benefits - Retirees	32,216	32,216	-	20,244	20,244	-
Authority Operations	25,313	-	25,313	18,850	-	18,850
<b>Subtotal</b>	<b>15,795,993</b>	<b>7,590,227</b>	<b>8,205,766</b>	<b>14,838,486</b>	<b>6,697,260</b>	<b>8,141,226</b>
Payments in Lieu of Taxes (PILOT)	1,233,220	-	1,233,220	1,204,078	-	1,204,078
<b>Total O&amp;M Expenses</b>	<b>17,029,213</b>	<b>7,590,227</b>	<b>9,438,986</b>	<b>16,042,564</b>	<b>6,697,260</b>	<b>9,345,304</b>

Notes:

1. The figures do not include depreciation and the amortization of bond expenses.
2. All expenses are presented on an accrual basis.
3. All years reflect fiscal years ending December 31.
4. Source: records of the MVWA.

## **COVID-19 and Its Impacts to Date on the MVWA**

The Governor of the State of New York declared a state of emergency in the State on March 7, 2020 for the COVID-19 outbreak; the state of emergency was lifted on June 24, 2021. The outbreak of COVID-19 altered the behavior of businesses and people in a manner that had negative effects on the service area and its economy. The impacts to date on Authority expenses have been minimal. Water use by quarterly customers in 2020 and 2021 was about 1.1% lower and 1.7% lower, respectively, compared to the previous year, relatively consistent with the long-term trend. Water use by monthly customers in 2020 and 2021 was about 8.5% lower and then 8.5% higher, respectively, compared to the previous year, showing a significant decline in the first year of the outbreak followed by a comparable rebound in the second year. There was a modest increase in year-end Net Accounts Receivable of about \$0.285 million from 2019 to 2020, and an increase of about \$0.285 million from 2020 to 2021. The 2021 year-end Net Accounts Receivable balance was \$2.932 million<sup>2</sup>. The Net Accounts Receivable balance as of November 30, 2022 is estimated to be \$2.413 million (unaudited)<sup>3</sup>.

The year-end operating cash balance for 2019 was \$9.8 million; such balances remained relatively strong throughout the outbreak with balances of \$10.1 million and \$9.8 million in 2020 and 2021. The operating cash balance as of November 30, 2022 is estimated to be \$11.8 million (unaudited)<sup>4</sup>.

## **PROJECTED FINANCIAL OPERATIONS**

The following parts of the Report present the components of the forecasted cash flows for the Regional System for 2022 through 2027, beginning with customer demand and anticipated revenue, followed by projected operation and maintenance expenses, capital spending, debt service and other obligations. Table 14 summarizes the forecasted cash flows and debt service coverage of the MVWA. Assumptions used in preparing the projections are included in the respective components.

### **Projected Customer Demand**

The budgeted revenues for 2022 assume that water demand will be the same compared to the prior twelve month period. Year-to-date water consumption through November 30 is 6.1% higher than in 2021, reflecting: the long-term factors affecting demand, the potential recovery from the effects of COVID-19 on the service area, and the positive effects of the addition of manufacturing-related water use by Wolfspeed, Inc. (“Wolfspeed”). In April 2022, Wolfspeed (NYSE: WOLF), opened its state-of-the-art, Mohawk Valley Silicon Carbide fabrication facility within the Regional System service area in the Town of Marcy. Information provided by the company notes that the 200mm wafer fab will help lead the industry-wide transition from silicon to Silicon Carbide-based semiconductors.<sup>5</sup> Total consumption by Wolfspeed in 2022 was not available as of the date of this Report. It is estimated by the MVWA that Wolfspeed will be the largest customer of the Regional System in 2023, with annual billings somewhat higher than the largest monthly user in 2021, the Midstate Correctional Facility. The budgeted revenues for 2023 assume a small increase in water demand compared to 2022. It is unknown at this time whether potential COVID-

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<sup>2</sup> Source: MVWA 2021 and 2020 Audited Financial Reports

<sup>3</sup> Source: MVWA Monthly Financial Report, November 2022

<sup>4</sup> Source: MVWA Monthly Cash Flow, 2019 - 2022

<sup>5</sup> Source: From [www.wolfspeed.com](http://www.wolfspeed.com) as of January 20, 2023

19 impacts, general economic conditions or other factors will affect water consumption and cash receipts from water customers during 2023.

It is assumed that demand from the customer base, excluding Wolfsped, will decline from the Authority's 2023 budgeted consumption at the rate of 1.5% per year in 2024 and in each year thereafter. This assumed pace of decline is somewhat greater than the recent experience illustrated in Table 3. Wolfsped is assumed to reach full operation in 2023 and its consumption is expected to remain constant in each year thereafter. There is no assurance that the effects of COVID-19 on the service area and customer demand will be limited to the impacts experienced to date or that demand will not decline at a greater than assumed rate in future years.

MVWA continues to explore opportunities to provide water service to communities that are not currently served by the Authority. An effort coordinated by the Herkimer County Industrial Development Agency to finance a 24" water transmission main extension from MVWA's system to serve municipalities east of the Authority's current service area is underway with construction completion originally scheduled for late 2024. The project cost will be partially financed with grants provided by New York State, with the remainder of cost spread over a user base of approximately 7,458 service connections and a population of approximately 22,000 people among five municipalities. The MVWA has sufficient water supply and treatment capacity to serve such customers. COVID-19 has delayed implementation of the project. It is currently estimated that the project will not have any impact on MVWA revenues during the Reporting Period. The projections of water consumption, cash flows, debt service coverage and water rates included in this Report do not reflect the impacts of this initiative or other potential expansion to the Regional System.

### **Projected Revenues**

Revenues from user charges are anticipated to account for approximately 93% of all revenues during the Reporting Period. User charges are comprised of a fixed base system fee or "readiness-to-serve" system charges that increase with increasing meter size and consumption-based charges. Excluding user charges for Wolfsped, the fixed charge is expected to account for approximately 28% of user charge payments and consumption-based charges are expected to account for approximately 69% of user charge payments. Receipts from Wolfsped are expected to account for approximately 3% of user charge payments, based almost entirely on consumption-based charges.

Consumption charges reflect a four-tier rate structure: for quarterly billed customers the unit charge per 1,000 cubic feet ("cf") of usage declines slightly from Tier 1 to Tier 2 and from Tier 2 to Tier 3. For customer usage in Tier 4 (quarterly usage greater than 70,000 cf), the unit rate is 32% lower than Tier 3, reflecting the Authority's relatively low marginal cost of supplying additional quantities of water to large customers. No changes in the rate structure are assumed during the Reporting Period; rates for each tier are expected to increase uniformly in accordance with projected percentage increases in rates.

The projected revenues from fixed system charges in 2022 through 2027 reflect the assumption that the number of customers by meter size will remain constant. The percentage increases in rates for fixed system charges is assumed to be the same as the percentage increases in rates for consumption-based charges throughout the Reporting Period.



Revenues from user charges in 2022 reflect the MVWA adopted budget and include the effects of the 2.5% average increase in water rates effective January 1, 2022. The budget projects that cash collections from customers for user charges for water service for 2022 will be \$24.1 million and cash collections from other sources of revenue will be \$1.7 million. Revenues from user charges in 2023 reflect the MVWA adopted budget and include the effects of the adopted 4.85% average increase in water rates that was effective January 1, 2023. The projected user charge revenues in future years reflect an assumed increase in rates of 4.90% in 2024 and average annual rate increases of 5.90% in 2025, 6.90% in 2026 and 6.50% in 2027. Rate increases in 2024 through 2027 are assumed to be effective on January 1 of each year, the first day of the fiscal year. Projected revenues also anticipate the continuation of the Authority's historically strong rate of bill collection as well as the levels of consumption previously described.

Other revenues of the MVWA also include interest on late payments by customers, payments from miscellaneous services, discontinuance charges, sewer billing and collection fees, laboratory fees and grants, and hydroelectric power revenue (net of required payments). The customer demand for miscellaneous services is expected to remain relatively stable in the future; as a result, revenues from these sources are anticipated to increase from 2022 to 2023 to reflect recent experience and then to remain constant during the remainder of the Reporting Period. The Water Quality Laboratory of the MVWA has established itself as a biological testing facility and has been recognized by the United States Environmental Protection Agency ("USEPA") to perform protozoan pathogen monitoring. Besides ensuring that routine monitoring requirements are met by the Regional System, the laboratory collects fees through its engagement in USEPA contracts, research grants with the New York State Energy Research and Development Authority, and other research projects.

Interest earnings on funds include investment earnings on the following accounts:

- Construction Fund;
- Debt Service Reserve Fund;
- Debt Service and Sinking Fund;
- Repair and Improvement Fund;
- Repair, Replacement and Renewal ("3R") Reserve Fund;
- Operation and Maintenance Reserve Fund;
- PILOT Payment Fund;
- Promissory Note Fund; and
- Operating Funds.

Table 9 presents the projected interest earnings on these funds. The interest earnings in 2022 and 2023 for each of the funds reflect anticipated fund balances and current or anticipated investment rates. The projected interest earnings for 2024 through 2027 reflect assumptions regarding anticipated fund balances and interest earnings rates; those assumptions that are outlined in the Appendix to this Report.

**Table 9**  
**MOHAWK VALLEY WATER AUTHORITY**  
**Calculation of Estimated Interest Earnings (\$)**

<b>Fund Balance - Operating</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Operating Funds	10,743,722	9,536,632	8,705,863	8,160,584	7,297,709	7,181,199
<b>Fund Balances - Trust Funds</b>						
Debt Service and Sinking Fund						
Average Fund Balance	3,259,192	3,376,912	3,451,694	3,904,684	3,907,869	4,222,283
Debt Service Reserve Fund						
Opening Balance	4,667,523	4,443,009	4,443,009	4,443,009	5,041,457	5,041,457
Additions	-	-	-	598,447	-	503,956
Subtraction	(224,514)	-	-	-	-	-
Ending Balance	4,443,009	4,443,009	4,443,009	5,041,457	5,041,457	5,545,412
Repair and Improvement Fund						
Average Fund Balance	4,619,899	4,499,730	4,499,730	4,499,730	4,499,730	4,499,730
RRR Fund						
Average Fund Balance	800,000	800,000	800,000	800,000	800,000	800,000
O&M Reserve Fund						
Average Fund Balance	500,000	500,000	500,000	500,000	500,000	500,000
Promissory Note Fund						
Average Fund Balance	240,358	240,358	240,358	240,358	240,358	240,358
Pilot Payment Fund						
Average Fund Balance	658,656	662,823	662,822	662,822	666,403	726,300
<b>Interest Earnings - Operating Funds</b>	15,000	12,000	21,765	20,401	18,244	17,953
<b>Interest Earnings - Trust Funds</b>						
Debt Service and Sinking Fund	13,953	74,182	8,629	9,762	9,770	10,556
Debt Service Reserve Fund	19,021	97,602	44,430	44,430	50,415	50,415
Repair and Improvement Fund	19,778	98,848	44,997	44,997	44,997	44,997
RRR Fund	3,425	17,574	8,000	8,000	8,000	8,000
O&M Reserve Fund	2,141	10,984	5,000	5,000	5,000	5,000
Promissory Note Fund	1,029	5,280	601	601	601	601
Pilot Payment Fund	2,820	14,561	1,657	1,657	1,666	1,816
Construction Fund	34,688	33,367	25,156	14,457	8,078	8,004
<b>Total</b>	<b>96,855</b>	<b>352,397</b>	<b>138,471</b>	<b>128,904</b>	<b>128,526</b>	<b>129,388</b>

**Notes:**

1. In May 2022, the Authority transferred amounts out of the Debt Service Reserve Fund into sinking funds because the balance was more than the requirement.
2. Repair and Improvement Fund, RRR Fund, and O&M Reserve Fund are assumed to remain constant throughout the Reporting Period.

The forecasted cash flows also anticipate that the MVWA will continue to bill and collect for sewer services on behalf of the City, the County, and other municipalities and be paid by each party during the Reporting Period.

The projected revenues of the MVWA in 2022 through 2027 are shown in Table 14, later in this Report. The estimated user payments in each year assume that there will be no impacts of any

continuation of the effects of COVID-19 resulting from the factors defined earlier. The Authority expects that potential reductions in revenues, if any, will be offset by reductions in revenue requirements. No assurance can be provided that COVID-19 and its resulting economic disruption will not result in Revenues that are lower than currently expected.

### **Operation and Maintenance Expenses**

Table 10 presents the projected operation and maintenance expenses of the MVWA for fiscal years 2022 through 2027. Expenses are presented for both Personnel Services (“PS”) and Other Than Personnel Services (“OTPS”). The anticipated 2022 and 2023 expenses reflect the adopted budgets of the MVWA for those years.

PS expenses reflect payroll expenses plus fringe benefits and pension contributions and are assumed to increase at an annual rate of 4% in 2024 and each year thereafter. It is anticipated that the total number of employees of the MVWA will remain relatively constant from 2023 through 2027.

The B&L 2023 Engineering Report concludes that staffing levels are sufficient for the operation, maintenance and Capital Improvement Program (the “CIP”) management for the Regional System. A “Sufficient” rating is the highest possible rating given by B&L. The rating is defined in the B&L 2023 Engineering Report to mean that the MVWA’s facilities and organization have the capabilities to meet current and future demands for the Reporting Period.

The MVWA maintains collective bargaining agreements with two labor unions: the International Brotherhood of Teamsters, Local Union 294, and the Management Employees Association. The present agreement with Local Union 294 was approved in February 2023 with an expiration date of December 31, 2025. The current agreement with the Management Employees Association was renewed in the Spring of 2022 with an expiration date of April 1, 2024.

The MVWA indicates that it is paying premiums for retiree health coverage in accordance with the respective collective bargaining agreements; the MVWA’s estimates of such costs are included in the projected PS portion of the operation and maintenance expenses.

OTPS expenses reflect contractual services costs for VEOLIA’s operation and maintenance of the water treatment plant, and costs other than labor (e.g., chemicals, electricity, spare parts and supplies) for the water transmission and distribution system, customer service and other units of the MVWA. OTPS expenses are assumed to increase at an annual rate of 4% in 2024 and each year thereafter. It is anticipated that no significant new facilities will be placed into service during the Reporting Period.

**Table 10**  
**MOHAWK VALLEY WATER AUTHORITY**  
**Projected Operation & Maintenance Expenses (\$)**  
**2022 through 2027**

Description	2022			2023			2024		
	Total	Personnel Services	OTPS	Total	Personnel Services	OTPS	Total	Personnel Services	OTPS
Administration	593,828	491,415	102,413	618,686	511,541	107,145	643,433	532,003	111,431
Human Resources and Safety	457,354	361,600	95,754	509,380	387,430	121,950	529,755	402,927	126,828
Finance and Accounting	623,832	468,352	155,480	632,427	478,662	153,765	657,724	497,808	159,916
Customer Service	466,564	461,414	5,150	490,406	484,856	5,550	510,022	504,250	5,772
Engineering	1,127,591	790,272	337,319	1,179,580	840,206	339,374	1,226,763	873,814	352,949
Water Distribution	776,222	512,042	264,180	799,185	547,475	251,710	831,152	569,374	261,778
Information Technology	1,074,997	487,957	587,040	1,153,270	514,346	638,924	1,199,401	534,920	664,481
Water Quality	791,656	585,438	206,218	841,716	619,462	222,254	875,385	644,240	231,144
Treatment Plant	3,295,116	-	3,295,116	3,588,340	-	3,588,340	3,731,874	-	3,731,874
Maintenance	4,647,460	3,754,360	893,100	5,078,974	3,985,074	1,093,900	5,282,133	4,144,477	1,137,656
General Services w/o PILOT	1,183,141	-	1,183,141	1,455,585	-	1,455,585	1,513,808	-	1,513,808
Benefits - Retirees	662,120	662,120	-	259,274	259,274	-	269,645	269,645	-
Long-Term Asset Purchases	82,000	-	82,000	180,000	-	180,000	187,200	-	187,200
<b>Total Operation &amp; Maintenance Expenses</b>	<b>15,781,881</b>	<b>8,574,970</b>	<b>7,206,911</b>	<b>16,786,823</b>	<b>8,628,326</b>	<b>8,158,497</b>	<b>17,458,296</b>	<b>8,973,459</b>	<b>8,484,837</b>
Payments in Lieu of Taxes (PILOT)	1,317,311	-	1,317,311	1,325,645	-	1,325,645	1,325,645	-	1,325,645
<b>Total Expenses</b>	<b>17,099,192</b>	<b>8,574,970</b>	<b>8,524,222</b>	<b>18,112,468</b>	<b>8,628,326</b>	<b>9,484,142</b>	<b>18,783,940</b>	<b>8,973,459</b>	<b>9,810,481</b>

Description	2025			2026			2027		
	Total	Personnel Services	OTPS	Total	Personnel Services	OTPS	Total	Personnel Services	OTPS
Administration	669,171	553,283	115,888	695,938	575,414	120,524	723,775	598,431	125,344
Human Resources and Safety	550,945	419,044	131,901	572,983	435,806	137,177	595,903	453,238	142,664
Finance and Accounting	684,033	517,721	166,312	711,394	538,430	172,965	739,850	559,967	179,883
Customer Service	530,423	524,420	6,003	551,640	545,397	6,243	573,706	567,213	6,493
Engineering	1,275,834	908,767	367,067	1,326,867	945,117	381,750	1,379,942	982,922	397,020
Water Distribution	864,398	592,149	272,250	898,974	615,835	283,140	934,933	640,468	294,465
Information Technology	1,247,377	556,317	691,060	1,297,272	578,569	718,703	1,349,163	601,712	747,451
Water Quality	910,400	670,010	240,390	946,816	696,811	250,006	984,689	724,683	260,006
Treatment Plant	3,881,149	-	3,881,149	4,036,394	-	4,036,394	4,197,850	-	4,197,850
Maintenance	5,493,418	4,310,256	1,183,162	5,713,155	4,482,666	1,230,489	5,941,681	4,661,973	1,279,708
General Services w/o PILOT	1,574,361	-	1,574,361	1,637,335	-	1,637,335	1,702,829	-	1,702,829
Benefits - Retirees	280,431	280,431	0	291,648	291,648	0	303,314	303,314	0
Long-Term Asset Purchases	194,688	-	194,688	202,476	-	202,476	210,575	-	210,575
<b>Total Operation &amp; Maintenance Expenses</b>	<b>18,156,628</b>	<b>9,332,397</b>	<b>8,824,230</b>	<b>18,882,893</b>	<b>9,705,693</b>	<b>9,177,200</b>	<b>19,638,209</b>	<b>10,093,921</b>	<b>9,544,288</b>
Payments in Lieu of Taxes (PILOT)	1,325,645	-	1,325,645	1,332,806	-	1,332,806	1,452,600	-	1,452,600
<b>Total Expenses</b>	<b>19,482,272</b>	<b>9,332,397</b>	<b>10,149,875</b>	<b>20,215,699</b>	<b>9,705,693</b>	<b>10,510,005</b>	<b>21,090,808</b>	<b>10,093,921</b>	<b>10,996,887</b>

Notes:

1. O&M expenses as presented here do not include MVWA in-house engineering costs, paving, hydrants, meters and vehicles and equipment. The annual costs associated with these requirements are expected to be cash-financed and are presented in line 24 of Table 14.

The anticipated cash requirements for payments in lieu of taxes (“PILOT”) in 2022 and 2023 are \$1,317,311 and \$1,325,645, respectively. The formula for determining the annual PILOT is defined in the Act creating the Finance Authority and the MVWA and has resulted in a gradual elimination of all school district payments prior to 2022. Payments to the City, the County and the Towns will increase periodically in future years in accordance with the formula. The components of the expected payments in 2022 through 2027 are illustrated in the B&L 2023 Engineering Report.

### **Capital Improvements**

Table 11 presents a summary of the CIP for the Regional System. The amounts shown in the Table reflect anticipated contractual commitments, totaling \$28.6 million over the five-year period of 2023 through 2027. Cash drawdowns in each year will differ from the amounts shown due to a number of factors including contractual commitments for prior years for which payments will be made during the Reporting Period as well as new projects within the CIP that may require multiple years to complete. See the Sources and Uses of Funds for the estimated cash needs for capital spending during the Reporting Period.

MVWA’s CIP includes a strong focus on improving the transmission and distribution systems. The 2023-2027 cost estimate identified in the CIP for this work is approximately \$17.7 million, or about 62% of the total planned commitments. The remainder of the CIP includes allowances for improvements to the treatment facilities, storage tanks, pump station upgrades and other facilities.

**Table 11**  
**MOHAWK VALLEY WATER AUTHORITY**  
**Capital Improvement Program (\$)**

<b>Facility</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>Total 2023 - 2027</b>
Treatment Facilities	390,000	100,000	1,580,000	350,000	285,000	2,705,000
Pump Stations						
Pump Station Upgrades	0	100,000	650,000	275,000	0	1,025,000
New Pump Stations	0	0	0	0	0	0
Open Reservoirs	0	40,000	430,000	0	0	470,000
Storage Tanks						
Tank Upgrades	560,000	690,000	245,000	250,000	1,200,000	2,945,000
New Tanks (Storage)	0	0	0	0	1,000,000	1,000,000
Metering Stations						
Metering Station Upgrade	50,000	0	50,000	0	150,000	250,000
New Meter Stations	0	0	270,000	0	0	270,000
Regulating Stations						
Regulating Station Upgrades	0	515,000	31,000	30,000	10,000	586,000
New Regulating Stations	0	0	0	0	275,000	275,000
Transmission/Distribution Mains						
Cleaning, Lining & Repairs	1,000,000	1,000,000	1,000,000	1,300,000	1,300,000	5,600,000
Replacement	3,900,000	3,000,000	650,000	150,000	700,000	8,400,000
New Transmission Mains	0	200,000	950,000	2,000,000	500,000	3,650,000
Other Facilities						
Facility/Security Improvements	80,000	115,000	1,030,000	170,000	0	1,395,000
<b>Total</b>	<b>5,980,000</b>	<b>5,760,000</b>	<b>6,886,000</b>	<b>4,525,000</b>	<b>5,420,000</b>	<b>28,571,000</b>

Notes:

1. Source: MVWA five-year Capital Improvement Program from the B&L Engineering Report.
2. The Capital Improvement Program as presented above reflects contractual commitments in each year by type of facility. The estimated cash flows attributable to these commitments are presented in Table 12 of this Report.
3. The Capital Improvement Program as presented above includes the cost of outside engineering services but does not include MVWA in-house engineering costs, paving, hydrants, meters and vehicles and equipment. The annual costs associated with these requirements are typically expected to be cash-financed and are included in line 24 of Table 14 of this Report.
4. All years reflect fiscal years ending December 31.

### Sources and Uses of Capital Funds

Table 12 shows the anticipated sources and uses of funds during the Reporting Period. Table 12 also summarizes the annual activity in the Construction Fund. It is assumed that the Finance Authority will issue the Series 2023 Bonds on or about February 2023 to finance capital improvements to the Regional System<sup>6</sup>.

It is assumed that the Finance Authority will subsequently issue bonds in 2025 in the amount of \$10.4 million and in 2027 in the amount of \$8.7 million in order to provide net deposits to the Construction Fund of \$9.5 million and \$8.0 million, respectively. The net proceeds from current and future Bond issues are deposited into the Construction Fund and are shown as additions to the Fund. The balance in the Construction Fund in each year represents the opening balance, plus estimated additions from Bond proceeds (where applicable), plus Capital Maintenance Deposits from MVWA revenues less anticipated withdrawals to pay for capital-related costs. The opening balances of approximately \$15.0 million and \$12.8 million represent the actual cash on hand and the estimated cash on hand in the Construction Fund as of December 31, 2021 and December 31, 2022, respectively. The estimated proceeds of the Series 2023 Bonds are shown as a deposit to the Construction Fund in 2023.

<sup>6</sup> Preliminary, subject to change

**Table 12**  
**MOHAWK VALLEY WATER AUTHORITY**  
**Sources and Uses of Capital Funds (\$)**

	2022	2023	2024	2025	2026	2027
<b>Sources</b>						
Net Proceeds from the Sale of Bonds	-	9,397,940	-	10,355,871	-	8,720,733
<b>Disposition of Proceeds</b>						
Deposits to the Construction Fund	-	9,150,000	-	9,500,000	-	8,000,000
Refunding Escrow Deposits	-	-	-	-	-	-
Deposits to the Debt Service Reserve Fund	-	-	-	598,447	-	503,956
Deposit to the Capitalized Interest Fund	-	-	-	-	-	-
Cost of Issuance	-	200,000	-	207,650	-	174,863
Underwriter's Discount, Insurance Premium and Other	-	47,940	-	49,773	-	41,914
<b>Total</b>	<b>-</b>	<b>9,397,940</b>	<b>-</b>	<b>10,355,871</b>	<b>-</b>	<b>8,720,733</b>
<b>Construction Fund</b>						
Beginning Balance	14,955,684	12,794,956	13,898,523	6,226,270	5,339,126	1,122,945
Deposits from Bond Proceeds	-	9,150,000	-	9,500,000	-	8,000,000
Capital Maintenance Deposits	540,000	1,290,000	1,300,000	1,231,000	1,310,000	1,310,000
Less: Capital Cash Requirements	(2,700,728)	(9,336,433)	(8,972,253)	(11,618,144)	(5,526,181)	(5,153,000)
Ending Balance	12,794,956	13,898,523	6,226,270	5,339,126	1,122,945	5,279,945

**Notes**

1. Beginning balance in the Construction Fund reflects the actual balance as of December 31, 2021 for 2022, the preliminary balance as of December 31, 2022 for 2023, and the calculated estimates of January 1st opening balances of each fiscal year thereafter.
2. Capital cash requirements reflect the needed funds for construction in each fiscal year based on capital commitments made prior to 2023 as well as expected commitments reflected in the CIP.
3. Ending balance reflects the estimated balance as of December 31st of each fiscal year.

Amawalk has included an allowance for a deposit to the Debt Service Reserve Fund (“DSRF”) in the sources and uses of funds for the anticipated 2025 Bonds and 2027 Bonds. However, such allowances may or may not be necessary and are preliminary and subject to change.

Preliminary estimates show that the DSRF will have a required balance of about \$4.115 million after issuance of the 2023 Bonds using the 125% of average annual debt service test. The current DSRF balance exceeds the minimum by over \$300,000. The sources and uses of funds and forecasted cash flows currently do not reflect the MVWA's withdrawal of or use of such funds in excess of the minimum.

**Projected Debt Service**

The projected debt service requirements for the outstanding bonds, the Series 2023 Bonds as well as anticipated future bond issues are presented in Table 13. The amount shown in 2022 for the 2001 B Bonds is net of the annual subsidy from the New York State Environmental Facilities Corporation. Debt service on all outstanding bonds reflects current principal and interest payments, excluding any of the potential effects of refunding. Debt service for the Series 2023 Bonds reflects the assumption of a 30-year term, interest-only payments in 2023 and 2024 and then principal and interest payments thereafter, and an estimated all-in true interest cost of 4.04%. Debt service on anticipated 2025 Bonds and 2027 Bonds is computed based on the assumption of a 30-year term, level annual repayment of principal and interest, no capitalized interest and an interest rate of 6.0%. The anticipated debt service for all bonds of the Finance Authority as well as Promissory Note payments to the City are shown in Table 13.

The MVWA has the ability to issue an aggregate amount of \$150.0 million in debt for general capital improvements and a separate bond limit of an additional \$150.0 million for projects

necessary to expand water delivery capacity to support industrial development within the service territory such as microchip manufacturing. The principal amounts of refunding bonds are not included in this limitation. The Authority has advised that the MVWA has sufficient capacity to issue the Series 2023 Bonds and will have remaining capacity to issue additional bonds during the Reporting Period.

The annual payment on the Promissory Note to the City reflects the terms of an agreed-upon schedule of payments to the City that requires the payment of the same amounts shown each year for the Reporting Period through the fortieth year following the acquisition of the Regional Water System. While well beyond the Reporting Period, it is noted that the final Promissory Note payment is scheduled for 2036.

**Table 13**  
**MOHAWK VALLEY WATER AUTHORITY**  
**Debt Service Requirements (\$)**

Description	Bond Issue	2022	2023	2024	2025	2026	2027
Outstanding Bonds							
2000 Bonds	8,528,820	2,230,000	2,230,000	2,230,000	2,230,000	2,230,000	2,225,000
2001B Bonds	2,876,300	477,827	-	-	-	-	-
2012A Bonds	16,022,437	765,000	-	-	-	-	-
2015 Bonds	25,000,000	1,599,930	2,083,180	2,076,305	2,075,930	2,076,680	2,081,689
2016 Bonds	8,770,000	530,725	526,975	529,075	531,975	527,775	526,400
2020A Bonds	14,920,000	596,800	596,800	596,800	596,800	596,800	596,800
2020B Bonds	10,955,000	318,102	1,089,078	1,080,707	1,080,695	1,088,515	1,083,657
Total Debt Service on Outstanding Bonds		6,518,384	6,526,033	6,512,887	6,515,400	6,519,770	6,513,546
2023 Bonds	9,397,940	-	227,792	390,500	541,625	543,625	545,125
Anticipated Future Bonds							
FY 2024 Bonds	-			-	-	-	-
FY 2025 Bonds	10,355,871				752,343	752,343	752,343
FY 2026 Bonds	-					-	-
FY 2027 Bonds	8,720,733						633,552
Total Debt Service on Anticipated Future Bonds		-	-	-	752,343	752,343	1,385,895
<b>Total Debt Service</b>		<b>6,518,384</b>	<b>6,753,825</b>	<b>6,903,387</b>	<b>7,809,368</b>	<b>7,815,738</b>	<b>8,444,566</b>
Promissory Note Payments		480,715	480,715	480,715	480,715	480,715	480,715

**Notes:**

1. The Bond Issue amount represents the principal amount of bonds when originally issued.
2. Debt Service on anticipated bonds in 2023 is calculated based on the assumption of a 30 year term and all-in true interest cost of 4.04%.
3. All years reflect fiscal years ending December 31.

The MVWA uses the proceeds of bonds to pay for the vast majority of its construction costs. Reflecting the policy of the MVWA, the costs associated with vehicles and equipment, meters and valves, and construction-related engineering services (including technical services of MVWA personnel) are typically paid through annual revenues of the Regional System. Small construction projects can also be paid through annual revenues. The anticipated costs to be paid through annual revenues are included under Cash-Financed Construction and Equipment and Capital Maintenance Deposits in Table 14 of the Report.

**Projected Financial Operations**

Table 14 presents a summary of the forecasted cash flows for the Regional System for 2022 through 2027. With the exception of carryforward revenues, debt service and debt service coverage, the figures shown in 2022 and 2023 reflected approved budgets of the Authority for those years. The approved increases in rates and charges are 2.5% for 2022 and 4.85% for 2023. The projected user charge revenues in future years reflect an assumed increase in rates of 4.90% in



2024 and annual rate increases of 5.90% in 2025, 6.90% in 2026 and 6.50% in 2027 in order to meet cash expenditure requirements and comply with debt service requirements as set forth in the Resolution.

As shown in line 28 of Table 14, positive net carry forward funds are maintained throughout the Reporting Period. Debt service coverage is computed on the basis of the following two methods:

*Debt Service Coverage Before Subordinated Payments (Line 29):*

$$\frac{[\text{Regional System Revenues (line 12)} - \text{Operation and Maintenance Expenses (line 16)}]}{\text{Total Debt Service of the Finance Authority (line 22)}}$$

*Debt Service Coverage After Giving Effect to Subordinated Payments (Line 30):*

$$\frac{[\text{Regional System Revenues (line 12)} - \text{Operation and Maintenance Expenses (line 16)} - \text{Subordinated Payments in Lieu of Taxes (line 17)} - \text{Subordinated Payment on the Promissory Note to the City (line 23)}]}{\text{Total Debt Service of the Finance Authority (line 22)}}$$

The Rate Covenant requires that revenues in each year be sufficient to recover 100% of the costs of Operation and Maintenance Expenses, Payments in Lieu of Taxes and Payment of the Promissory Note to the City as well as 115% of the Debt Service of the Finance Authority. As illustrated in Table 14, it is anticipated that the requirements of the Rate Covenant will be met in each year during the Reporting Period.

**Table 14  
MOHAWK VALLEY WATER AUTHORITY  
Forecasted Cash Flow (\$)**

<b>Line No.</b>		<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
1	Operating Revenue						
2	User Charge Revenue	24,079,000	25,656,078	26,632,643	27,911,288	29,528,985	31,125,078
3	Other Revenues						
4	Miscellaneous Fees and Charges	1,151,000	1,519,886	1,519,886	1,519,886	1,519,886	1,519,886
5	Interest Earnings on Operating Funds	15,000	12,000	21,765	20,401	18,244	17,953
6	Interest Earnings on Trust Funds	96,855	352,397	138,471	128,904	128,526	129,388
7	Billing and Collection Fees	293,000	290,000	290,000	290,000	290,000	290,000
8	Laboratory Fees and Grants	92,000	128,983	125,000	125,000	125,000	125,000
9	Hydroelectric Power Revenue	55,000	95,000	95,000	95,000	95,000	95,000
10	Current Revenues	25,781,855	28,054,344	28,822,764	30,090,480	31,705,641	33,302,305
11	Carryforward Revenues	10,743,722	9,536,632	8,705,863	8,160,584	7,297,709	7,181,199
12	Total System Revenues	36,525,577	37,590,976	37,528,627	38,251,064	39,003,350	40,483,504
13	Operation and Maintenance Expenses						
14	Personnel Services	8,574,970	8,628,326	8,973,459	9,332,397	9,705,693	10,093,921
15	Other Than Personnel Services	7,206,911	8,158,497	8,484,837	8,824,230	9,177,200	9,544,288
16	Total O&M Expenses (excluding PILOT)	15,781,881	16,786,823	17,458,296	18,156,628	18,882,893	19,638,209
17	Payments in Lieu of Taxes	1,317,311	1,325,645	1,325,645	1,325,645	1,332,806	1,452,600
18	Debt Service of the Finance Authority						
19	Outstanding Bonds	6,518,384	6,526,033	6,512,887	6,515,400	6,519,770	6,513,546
20	2023 Bonds	-	227,792	390,500	541,625	543,625	545,125
21	Anticipated Future Bonds	-	-	-	752,343	752,343	1,385,895
22	Total Debt Service	6,518,384	6,753,825	6,903,387	7,809,368	7,815,738	8,444,566
23	Promissory Note Payment	480,715	480,715	480,715	480,715	480,715	480,715
24	Cash-Financed Construction & Equipment	2,025,654	2,248,106	1,700,000	1,700,000	1,700,000	1,700,000
25	Infrastructure Maintenance Deposits	540,000	1,290,000	1,300,000	1,231,000	1,310,000	1,310,000
26	Rate Study Deposits - O&M, 3R Reserves	325,000	-	200,000	250,000	300,000	300,000
27	Total Revenue Requirements	26,988,945	28,885,114	29,368,042	30,953,355	31,822,151	33,326,089
28	Net Carryforward <small>line 12-line 27</small>	9,536,632	8,705,863	8,160,584	7,297,709	7,181,199	7,157,414
29	Debt Service Coverage Before Subordinated PILOT and Promissory Note Payments <small>(line 12 - line 16)/line 22</small>	3.18	3.08	2.91	2.57	2.57	2.47
30	Debt Service Coverage <small>(line 12 - line 16 - line 17 - line 23)/line 22</small>	2.91	2.81	2.65	2.34	2.34	2.24
31	<b>Projected Increases in User Rates</b>	<b>2.5%</b>	<b>4.85%</b>	<b>4.90%</b>	<b>5.90%</b>	<b>6.90%</b>	<b>6.50%</b>

**Notes:**

1. All figures reflect the 12-month fiscal years ending December 31st.
2. The increase in user rates for 2022 and 2023 reflects the adopted rates of the Board.
3. The debt service coverage calculation includes cash amounts carried forward from prior years which are permissible under MVWA's financing agreement for purposes of satisfying the debt service coverage requirement.

### **Required Reserves and Unrestricted Cash**

As of December 31, 2022, the MVWA maintained reserve funds that each have a balance (unaudited) which is equal to or greater than the amount required under the Resolution.

The Authority's operating fund retains carryforward revenues (cash) from prior years that carry to the subsequent year. Such carryforward funds are unrestricted and available to the MVWA, if needed. The forecasted cash flows anticipate the carry forward from each year will roll forward to the subsequent year in each year of the Reporting Period.

## Comparison of Rates and Charges

Amawalk prepared a comparison of the water rates and charges for the Regional System with those of water utilities in other jurisdictions. The results of this survey are presented in Table 15. The MVWA charges are reasonable in comparison to other water utilities and are particularly competitive for large customers.

**Table 15**  
**MOHAWK VALLEY WATER AUTHORITY**  
**Comparative Annual Water User Charges (\$)**

Single Family Residential		Commercial		Industrial	
City	Annual Charge	City	Annual Charge	City	Annual Charge
1 Troy	189	1 Schenectady	2,577	1 Schenectady	257,700
2 Albany	206	2 Troy	3,632	2 Rochester	273,745
3 Syracuse	225	3 Watertown	3,762	3 Buffalo	288,254
4 Watertown	256	4 Albany	3,957	4 Columbus	332,149
5 Schenectady	258	5 Buffalo	4,100	5 <b>MVWA</b>	<b>342,549</b>
6 Binghamton	292	6 Rochester	4,302	6 Syracuse	350,442
7 New York	299	7 Syracuse	4,332	7 Troy	363,200
8 Yonkers	314	8 Binghamton	4,540	8 Watertown	369,850
9 Rochester	320	9 Allentown	5,073	9 Binghamton	441,754
10 Cleveland	332	10 Cleveland	5,092	10 Allentown	459,134
11 Columbus	338	11 Columbus	5,209	11 Philadelphia	492,984
12 Poughkeepsie	350	12 <b>MVWA</b>	<b>5,604</b>	12 Cleveland	498,123
13 Buffalo	408	13 New York	5,749	13 Baltimore	523,848
14 Philadelphia	410	14 Yonkers	6,030	14 New York	574,866
15 Newburgh	410	15 Philadelphia	6,363	15 Yonkers	602,942
16 <b>MVWA</b>	<b>417</b>	16 Poughkeepsie	6,531	16 Poughkeepsie	649,931
17 Allentown	495	17 Baltimore	6,642	17 Newburgh	788,000
18 Baltimore	513	18 Newburgh	7,880	18 Albany	863,636
19 New Rochelle	676	19 New Rochelle	10,469	19 New Rochelle	1,020,240
20 Pittsburgh	922	20 Pittsburgh	14,015	20 Pittsburgh	1,165,388
Average	381		5,793		532,937

Note: User Charges are based upon information provided by the identified cities in December 2022 and standardized assumptions regarding water consumption and other factors. Actual charges in each city will vary in accordance with local usage patterns. Charges for the MVWA Service Area reflect rates in effect for FY 2022, ending December 31, 2022.

□

## Principal Assumptions

Amawalk has relied on certain historical financial and statistical data supplied by the MVWA. While such data is considered reliable, Amawalk has not independently verified the accuracy of such data. In the analysis of the forecast of future operations summarized in this report, Amawalk has reviewed assumptions with respect to conditions, events, and circumstances which may occur in the future. We believe that these assumptions are reasonable and attainable, although actual results may differ from those forecast as influenced by the conditions, events, and circumstances which actually occur. The principal assumptions used in the forecast of future operations are as follows:

1. The MVWA approves future increases in rates which will provide revenue as projected herein.
2. Water consumption by customers will continue to decline over the long-term at a modest annual rate.

3. All contracts and agreements of the MVWA, the Finance Authority and, where appropriate, the City which have been relied upon in preparing this report are fully enforceable in accordance with their terms and conditions.
4. There will be no significant changes in Federal or State law which would materially adversely impact the MVWA or the Finance Authority's operations.

## APPENDIX

The Construction Fund will hold moneys currently available for capital projects and will be supplemented in the future by the proceeds of future bond issues and capital maintenance deposits from MVWA Revenues. Withdrawals from the Construction Fund will be used for capital-related expenditures including construction, equipment and engineering. The anticipated annual interest earnings on the Construction Fund are computed on the basis of the average of the beginning and ending balance in the Construction Fund times an assumed interest earnings rate of 0.25% annually. Construction Fund interest earnings are assumed to be utilized as revenues in the year that they are earned.

The Debt Service Reserve Fund is intended to provide a reserve equal to the lower of the maximum annual principal and interest payment on bonds outstanding in any year or 125% of the average annual debt service. Debt Service Reserve Fund interest earnings are assumed at the rate of 1.0% annually for 2024 through 2027. The budgeted interest earnings for 2023 are greater, reflecting recent investment earnings rates and fund balances. Interest earnings on the Debt Service Reserve Fund for all bonds are assumed to be available in the year that they are earned. The balances shown for the Debt Service Reserve Fund are anticipated to change somewhat after the issuance of 2023 Bonds; the effect on interest earnings is not expected to be material.

The Debt Service and Sinking Fund is used to retain cash in anticipation of upcoming principal and interest payments. Since moneys in the Debt Service and Sinking Fund will be available for investment for a limited period of time, interest earnings are assumed at the rate of 0.25% annually for 2024 through 2027. The budgeted interest earnings for 2023 are greater, reflecting recent investment earnings rates and fund balances. Annual interest earnings are computed based on the assumption that moneys in the Debt Service and Sinking Fund are available for investment for an average of one-half of the year. The Debt Service and Sinking Fund interest earnings are assumed to be available as revenues in the year that they are earned.

The MVWA is required to maintain a minimum of \$500,000 in the Repair and Improvement Fund and has a Fund balance of almost \$4.5 million as of December 31, 2022. The interest earnings on the Repair and Improvement Fund are assumed at the rate of 1.0% of the Fund balance for 2024 through 2027. The budgeted interest earnings for 2023 are greater, reflecting recent investment earnings rates and fund balances. The Repair and Improvement Fund interest earnings are assumed to be available as revenues in the year that they are earned.

The MVWA has created and deposited funds in two additional separate reserves: the Repair, Replacement & Renewal Reserve (“3R”) and the Operation & Maintenance Reserve. These two funds are not required under the Financing Agreement but reflect the interest of the MVWA in enhancing its financial position so that unforeseen cash needs can be more readily accommodated. These reserve funds are assumed to earn interest at the rate of 1.0% annually for 2024 through 2027. The budgeted interest earnings for 2023 are greater, reflecting recent investment earnings rates and fund balances. Interest earnings on these reserve funds are assumed to be available in the year that they are earned.

The Promissory Note and PILOT Payment Funds are used to retain cash in anticipation of upcoming Promissory Note payments to the City and Payments in Lieu of Taxes, respectively. It is assumed that moneys in these Funds are available for investment for an average of one-half of the year. Interest earnings on these Funds are estimated at the rate of 0.25% annually for 2024 through 2027. The budgeted interest earnings for 2023 are greater, reflecting recent investment earnings rates and fund balances.

Carryforward revenues reflect prior year surpluses which are expected to be available to pay the annual costs of the MVWA. Such funds are included within the Operating Funds of the Regional System and are assumed to earn interest at the rate of 0.25% annually for 2024 through 2027. The budgeted interest earnings for 2023 are greater, reflecting recent investment earnings rates and fund balances. Carryforward revenues do not include moneys in either the 3R and Operation and Maintenance Reserve Funds or any of the required reserve funds.

**Proposed Form of Opinion of Bond Counsel**

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## APPENDIX C

### Proposed Form of Bond Counsel Opinion

March \_\_, 2023

Upper Mohawk Valley Regional Water  
Finance Authority  
One Kennedy Plaza  
Utica, New York 13502

Re: Upper Mohawk Valley Regional Water Finance Authority  
Water System Revenue Bonds, Series 2023

Ladies and Gentlemen:

We have acted as bond counsel with respect to the issuance by the Upper Mohawk Valley Regional Water Finance Authority (the “Authority”), a body corporate and politic constituting a public benefit corporation of the State of New York (the “State”), of its \$\_\_\_\_\_ Water System Revenue Bonds, Series 2023 (Green Bonds) (the “Series 2023 Bonds”). The Series 2023 Bonds are authorized to be issued pursuant to (i) the Upper Mohawk Valley Regional Water Finance Authority Act, being Title 10 of Article 5 of the Public Authorities Law of the State, as amended (which, together with the Upper Mohawk Valley Regional Water Board Act, being Title 10-A of Article 5 of the Public Authorities Law of the State, are herein collectively referred to as the “Act”), (ii) the Authority’s Water System General Revenue Bond Resolution (the “General Resolution”), dated as of December 1, 1996, by and between the Authority and The Bank of New York Mellon, as successor to United States Trust Company of New York, as trustee (the “Trustee”), and (iii) the Authority’s Fourteenth Supplemental Resolution (the “Fourteenth Supplemental Resolution”) dated as of March 1, 2023, by and between the Authority and the Trustee. All capitalized terms used herein and not otherwise defined shall have the respective meanings ascribed thereto in either the General Resolution or in the Fourteenth Supplemental Resolution.

The Series 2023 Bonds are being issued pursuant to the Act, the General Resolution and the Fourteenth Supplemental Resolution. The Series 2023 Bonds are being issued to pay for the (i) costs of the 2023 Project, (ii) funding of the debt service reserve fund, and (iii) costs of issuance of the Series 2023 Bonds.

The Series 2023 Bonds are dated, will mature and will bear interest at the respective rates per annum as set forth in the Fourteenth Supplemental Resolution. The Series 2023 Bonds are issuable initially only in the form of fully registered bonds.

The Series 2023 Bonds are subject to redemption prior to maturity as a whole or in part, at such time or times, under such circumstances, at such redemption prices and in such manner as is set forth in Article II of the Fourteenth Supplemental Resolution.

The Authority has reserved the right to issue Additional Parity Indebtedness on the terms and conditions and for the purposes stated in the General Resolution. Except as otherwise provided in the General Resolution, the Series 2023 Bonds and all such Additional Parity Indebtedness heretofore or hereafter issued under the General Resolution rank and will rank equally as to security and payment.

In connection with the issuance of the Series 2023 Bonds, we have examined the following:

- (a) The Constitution of the State and such statutes and regulations as we have deemed relevant to this opinion, including particularly the Act.
- (b) The Internal Revenue Code of 1986, including particularly Sections 103 and 141 through 150 thereof and the applicable regulations of the United States Treasury Department promulgated thereunder and under Section 103 of the Internal Revenue Code of 1954 (collectively, the “Code”).
- (c) Certified copies of proceedings of the Authority preliminary to and in connection with the issuance of the Series 2023 Bonds.
- (d) Certified copies of proceedings of the Authority approving the form and content of the General Resolution and the Fourteenth Supplemental Resolution and authorizing the execution and delivery thereof.
- (e) Executed counterparts of the General Resolution and the Fourteenth Supplemental Resolution.
- (f) The Tax Certificate of the Authority and the Board.
- (g) Such other documents and proceedings as we have considered necessary or appropriate in the circumstances to render the opinions below.

The opinion expressed in paragraph (6) is premised upon (i) the accuracy of the factual information and the truthfulness of the representations and expectations set forth in the certificates described in paragraph (f) above, and (ii) the assumption that the Authority and the Board will comply with their respective covenants as to future acts that are necessary to preserve the exclusion of interest on the Series 2023 Bonds from gross income for federal income tax purposes. In rendering the opinions expressed in paragraphs (1) through (7) we have assumed the accuracy and truthfulness of all public records, documents and proceedings, including factual information, expectations and statements contained therein, examined by us which have been executed or certified by public officials acting within the scope of their official capacities, and have not verified the accuracy or truthfulness thereof. We also have assumed the genuineness of the signatures appearing upon such public records, documents and proceedings and the certifications thereof. Based upon the foregoing, it is our opinion that:

- (1) The Authority was duly created and is validly existing under the provisions of the Act as a body corporate and politic constituting a public benefit corporation of the State with full power and authority to issue the Series 2023 Bonds and to pledge the Revenues as security for the Series 2023 Bonds under the General Resolution and the Fourteenth Supplemental Resolution and to perform all its obligations under the General Resolution and the Fourteenth Supplemental Resolution.
- (2) The Authority has full power and authority to enter into the General Resolution and the Fourteenth Supplemental Resolution. The General Resolution and the Fourteenth Supplemental Resolution have each been duly authorized, executed and delivered by the Authority and, assuming due authorization, execution and delivery of the General Resolution and the Fourteenth Supplemental Resolution by the Trustee and that each is enforceable against the Trustee, are each in full force and effect and are the valid and binding obligations of the Authority and enforceable in accordance with their terms; provided, however, that the enforceability (but not the validity) of the General Resolution and the Fourteenth Supplemental Resolution may be limited by any applicable bankruptcy, insolvency, moratorium or other law or enactment now or hereafter enacted by the State or the federal government affecting the enforcement of creditors’ rights and may be subject

to judicial discretion and except that equitable remedies lie in the discretion of a court and may not be available.

- (3) The General Resolution creates a valid pledge which it purports to create of the Trust Estate, as defined therein.
- (4) The Series 2023 Bonds have been duly and validly authorized and issued in accordance with law, including the Act, and in accordance with the General Resolution and the Fourteenth Supplemental Resolution. The Series 2023 Bonds, together with the interest payable with respect thereof, are legal, valid and binding special obligations of the Authority as provided in the General Resolution and the Fourteenth Supplemental Resolution, enforceable in accordance with their terms and the terms of the General Resolution and the Fourteenth Supplemental Resolution; provided, however, that the enforceability (but not the validity) of the Series 2023 Bonds may be limited by any applicable bankruptcy, insolvency, moratorium or other law or enactment now or hereafter enacted by the State or the federal government affecting the enforcement of creditors' rights, and may be subject to judicial discretion and except that equitable remedies lie in the discretion of a court and may not be available. The Series 2023 Bonds are entitled to the benefits of the General Resolution, the Fourteenth Supplemental Resolution and the Act.
- (5) Neither the State, the City of Utica, Oneida County or Herkimer County, nor any other municipality or public corporation, other than the Authority, shall be liable on the Series 2023 Bonds. The Series 2023 Bonds are not a debt of the State, the City of Utica, Oneida County, Herkimer County or any other municipality or public corporation, other than the Authority.
- (6) Interest on the Series 2023 Bonds is not includable in gross income of the owners of the Series 2023 Bonds for federal income tax purposes. Interest on the Series 2023 Bonds, however, will be includable in the gross income of the owners thereof retroactive to the date of issue of the Series 2023 Bonds in the event of a failure by the Authority or the Board to comply with applicable requirements of the Code, and their respective covenants regarding the use, expenditure, and investment of the proceeds of the Series 2023 Bonds and the timely payment of certain investment earnings to the United States Treasury.
- (7) Interest on the Series 2023 Bonds is not an item of tax preference for purposes of the alternative minimum tax on individuals.
- (8) Under existing law, interest on the Series 2023 Bonds is exempt from personal income taxes imposed by the State or any political subdivision thereof (including The City of New York).

Except as set forth in paragraphs (6), (7), and (8) we express no opinion as to any federal or state tax consequences of the ownership or disposition of the Series 2023 Bonds, including the applicability of the alternative minimum tax to the adjusted financial statement income of certain corporations. Furthermore, we express no opinion as to any federal, state or local tax law consequences with respect to the Series 2023 Bonds, or the interest thereon, if any action is taken or not taken with respect to the Series 2023 Bonds or the proceeds thereof without our approval or upon the advice or approval of other counsel. We call attention to the fact that the opinions expressed herein and the exclusion from gross income of the interest on the Series 2023 Bonds as described above may be affected by actions taken or omitted or events occurring or not occurring after the date hereof. We have not undertaken to determine, or to inform any person or entity, whether any such actions or events are taken, omitted, occur or fail to occur.

The scope of our engagement in relation to the issuance of the Series 2023 Bonds is limited solely to the examination of the facts and law incident to rendering the opinions expressed herein. Such opinions are not

intended and should not be construed to express or imply any conclusion that the amount of Revenues will be sufficient to enable the Authority to pay the principal of or interest on the Series 2023 Bonds as the same respectively become due and payable. Reference should be made to the Official Statement prepared by the Authority in relation to the Series 2023 Bonds for factual information which, in the judgment of the Authority, could materially affect the ability of the Authority to pay such principal and interest. While we have participated in the preparation of such Official Statement, we have not verified the accuracy, completeness or fairness of the factual information contained therein and, accordingly, we express no opinion as to whether the Authority, in connection with the sale of the Series 2023 Bonds, has made any untrue statement of a material fact or omitted to state a material fact necessary in order to make any statements made, in the light of the circumstances under which they were made, not misleading.

Very truly yours,

**Selected Economic and Demographic  
Information About the Area Served by the Regional System**

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## **APPENDIX D**

### **Selected Economic and Demographic Information About the Area Served by the Regional System**

#### **Introduction**

This Appendix presents information regarding economic and demographic factors concerning the area served by the MVWA Regional System. All of the areas served by the Regional System are located in either Oneida County or Herkimer County in central upstate New York. Most of the Regional System serves areas in Oneida County in or around the City. Under the Act, the “Service Area” of the MVWA is defined to include all cities, villages, towns and counties any part of which was served by the Regional System as it existed at the time of the creation of the MVWA, and, hence, includes Oneida and Herkimer Counties.

The economic and demographic information in this Appendix is limited to the areas served by the Regional System and to the immediately surrounding areas, except where data is only available on the basis of larger areas (such as local governmental units or regional statistical units) in which parts of the Regional System are located.

Sources of the information are indicated in the text or immediately following the charts and tables. Although the Finance Authority considers the sources to be reliable, the Finance Authority has made no independent verification of the information presented herein from the other sources and does not warrant its accuracy.

#### **General Information**

The area served by the Regional System is located in central upstate New York, in the area commonly known as the Mohawk Valley. The area served by the Regional System is situated on the New York State Thruway. The City of Syracuse is located approximately 45 miles to the west of the City, New York (the largest municipality served by the Regional System) and the City of Albany approximately 95 miles to the east of the City.

The area served by the Regional System consists of a substantial part of Oneida County, including the City and the Towns of Whitestown, New Hartford, Deerfield and Marcy and parts of the Towns of Kirkland, Westmoreland and Trenton. A portion of the Towns of Frankfort and Schuyler, located in Herkimer County, are also served by part of the Regional System. There are six villages in Oneida County served by the Regional System, including New York Mills, Whitesboro, Oriskany, Yorkville, New Hartford and Holland Patent.

Excellent transportation and cultural facilities serve the area included in the Regional System. The area is accessible to other urban centers via the New York State Thruway, New York State Barge Canal, Conrail and the New York, Susquehanna and Western Railroads, the Hancock International Airport and the Oneida County Airport, and an extensive system of state and local highways. Cultural attractions including the Munson Williams Proctor Museum and School of Arts, the Stanley Performing Arts Center, the Utica Memorial Auditorium and the Utica Zoo are all located in the City. The Turning Stone Casino is located in Verona, 23 miles west of Utica.

The Thruway and Barge Canal have approximately 40 miles of interstate road and waterway, respectively, through the center of the area served by the Regional System. The Thruway provides three interchanges in the area. The Regional System is within 30 minutes of I-88.

Amtrak and Conrail maintain a major rail line through the area. The New York, Susquehanna, and Western Railroad provide local industrial service in the City area, as well as an alternate industrial transportation service to New York and Chicago. The Hancock International Airport, located in Syracuse, supports commercial air traffic to other major airports.

### **Major Employers**

The major employers in or proximate to the portions of the area serviced by the Regional System are summarized in the following table:

<u>Name</u>	<u>County</u>	<u>Business</u>	<u>Approximate Number of Employees</u>
Oneida Indian Nation Enterprises	Oneida	Resort and Casino	4,500
Mohawk Valley Network	Oneida	Medical Facilities	4,300
Bassett Healthcare	Various	Medical Facilities	4,267
Upstate Cerebral Palsy	Oneida	Social Services	1,670
Utica City School District	Oneida	Education	1,522
Metropolitan Life Insurance	Oneida	Insurance/Finance	1,300
Resource Center for Independent Living	Oneida	Independent Living Facilities	1,250
Air Force Research Lab	Oneida	Research & Development	1,164
Utica National Insurance Group	Oneida	Insurance/Finance	1,149
BNY Mellon Bank	Oneida	Banking	1,140
Defense Finance and Accounting Service	Oneida	Accounting services	1,100
Rome City School District	Oneida	Education	1,035
Indium Corporation	Oneida	Manufacturing	946
Utica University	Oneida	Education	806
Wal-Mart Distribution Center	Oneida	Warehousing/Transportation	775
Masonic Care Community of NY	Oneida	Nursing Home and Research	740
Hamilton College	Oneida	Education	725
Bank of America	Oneida	Banking	700
Rome Health	Oneida	Healthcare	688
Mohawk Valley Community College	Oneida	Education	650

In addition to the above, the Federal, State and County governments in the Utica-Rome MSA employ approximately 29,100 people.

*Source:* Mohawk Valley Economic Development Growth Enterprises Corporation (“EDGE”) and New York State Department of Labor Current Employment by Industry. EDGE is a private not-for-profit corporation supporting regional economic development.



## **Economic Development in Oneida County**

### *Griffiss Business and Technology Park*

Griffiss Business and Technology Park (“Griffiss Park”) is a 1,600+/- acre multi-use business, technology, and industrial park on the grounds of the former Griffiss Air Force Base in the City of Rome. Griffiss Park is host to approximately 80 employers with a total of nearly 6,000 employees. Major employers include the Air Force Research Laboratory, Defense Finance and Accounting Service, Eastern Air Defense Sector, Collins Aerospace, Assured Information Security, BAE Systems, Booz Allen Hamilton, Kris-Tech Wire, Family Dollar, Orgill, Sovena USA, and the Rome City School District.

More than \$920 million in public and private funding has been invested in the development of Griffiss Park since its realignment as an Air Force base in 1995. These capital projects included demolition of more than 2.5 million square feet of obsolete former military buildings and housing to make way for new development; construction of a new parkway and other roads to improve the transportation system; development of a walking trail and sculpture garden, construction of a new public high school; a project to consolidate and improve space occupied by the Air Force Research Lab; new manufacturing plants for Collins Aerospace, MGS Manufacturing, Sovena USA, and Kris-Tech Wire; construction of two major distribution centers; construction of new office buildings for various private sector uses; development of two new hotels to serve Griffiss Park’s many contractors and visitors; capital improvements to numerous facilities for industrial use, and; infrastructure improvements to make various parcels shovel ready for development.

- Griffiss Park employees commute from 30 different counties including Oneida County.
- The Innovare Advancement Center facilitates the cooperation of private industry, academia, and government in developing solutions to critical cyber security problems. Innovare serves as a business incubator, a training resource for professionals and students, and the host of the HUSTLE – a program which enables entrepreneurship development through structured curricula and a business competition. These programs have led to the creation and growth of dozens of new companies in the area, and the commercialization of dozens of military technologies.
- Oneida County/Griffiss International Airport (“GIA”) completed the rehabilitation of all of its five Nose Docks on grounds.
- GIA recently completed its new \$7.1 million airport terminal which includes a Customs Inspection Building.
- GIA is one of seven test sites nationwide for FAA-approved testing on unmanned aerial systems (i.e., drones). This makes GIA one of the premier locations nationwide for drone testing and development. To date, more than 3,000 test flights have occurred at GIA.
- The 2022 completion of SkyDome, which is the nation’s largest indoor drone testing facility. This facility is located in a former hangar adjacent to the airfield of GIA, allowing for indoor-to-outdoor and outdoor-to-indoor drone flight testing.
- A new Class-A office building was constructed as the new headquarters of NYSTEC, a technology company, and will also lead to an expanded presence of Booz Allen Hamilton. Another 40,000 square foot office building is currently under construction.

- Orgill Inc. has opened a new 775,000 square foot, \$70 million distribution center and has already filled over 300 total jobs.

#### *Additional Local Economic Growth*

The Oneida County Industrial Development Agency (“OCIDA”) is organized and operates to provide tax incentives for eligible projects and the Oneida County Local Development Corporation (“OCLDC”) is organized and operates to provide tax exempt bond financing. Each year, OCIDA authorizes PILOT agreements to promote economic development, private investment and job growth. Examples of recently approved projects include corporate expansions for Wolfspeed Inc. (“Wolfspeed”) (formerly Cree, Inc.), Orgill Inc., Indium Corporation, and Matt Brewing Company.

New York State and Mohawk Valley EDGE have invested more than \$60 million in the pre-permitting, engineering, marketing, and site development of Marcy Nanocenter at SUNY Polytechnic Institute, a 450-acre greenfield on the State University of New York Polytechnic Institute campus being marketed to the advanced manufacturing/semiconductor industry. In April 2022, Wolfspeed the global leader in silicon carbide technology, opened its new state-of-the-art 200mm silicon carbide (“SiC”) water fabrication facility at Marcy Nanocenter, which is the first and only 200mm SiC semiconductor plant in the world. Wolfspeed is ground leasing approximately 55 acres of the Marcy Nanocenter site, supporting 600,000 square feet of production and support space. The site also includes expansion space that would enable the company to double its water fabrication capacity in the future. The balance of the Marcy Nanocenter site includes available acreage to support additional semiconductor growth that would support another 1.0 million square feet of cleanroom space by other semiconductor companies, and the creation of approximately 2,000 direct and indirect jobs.

New York State will provide \$500 million in performance based, capital grants from Empire State Development Corporation (“ESDC”) to reimburse a portion of Wolfspeed’s costs of outfitting the new facility and acquiring and installing machinery and equipment, and another \$1 million in Excelsior Jobs Program tax credits. This investment also includes a \$30 million research and development commitment by Wolfspeed, with plans to create over 600 full-time, highly-skilled technician and engineering positions at the Marcy Nanocenter on the SUNY Polytechnic Institute campus. As of April 2022, Wolfspeed has hired 300 of the forecasted 614 full-time jobs. In 2021, ESDC named it the “Project of the Year” in New York State.

To help support talent attraction efforts with Wolfspeed and other semiconductor companies’ expansions, Mohawk Valley EDGE created a master plan for a 33-acre site near the Marcy Nanocenter for a mixed-use residential and commercial development known as “Tech Barn.”

The Quad-C building, on the adjacent campus of SUNY Polytechnic Institute in Marcy, is now home to the Danish company Semikron Danfoss. To date, more than 100 employees have been hired, with dozens more jobs currently being filled. The company is expected to employ up to 300 high-tech workers at full production.

Mohawk Valley EDGE continues to partner with Mohawk Valley Community College, Working Solutions, BOCES, and other training providers to develop customized training programs for businesses.

Mohawk Valley EDGE continues to market the entire region to site selectors, developers and businesses around the globe who are seeking to expand their presence and invest in the northeast United States. Key development sites in the Mohawk Valley being aggressively marketed include the Marcy Nanocenter, Griffiss Business & Technology Park, Oneida County Business Park, Chaminade Business Park, and Schuyler Business Park.

Mohawk Valley Health System (“MVHS”) is currently constructing its new 373-licensed bed regional medical center in downtown Utica, which will replace MVHS’s two existing inpatient campuses, St. Luke’s Hospital and St. Elizabeth Medical Center. The new Wynn Hospital is funded in part by a \$300 million grant from the New York State Department of Health. The facility is expected to open in October 2023 and will bring over 1,000 MVHS employees to downtown Utica. In association with this project, a new parking garage and a 90,000+ square-foot medical office building are also being constructed.

Since the beginning of the Regional Economic Development Council program in 2011, the Mohawk Valley region has won more than \$600 million in grant funding to advance economic development projects, creating total investments of over \$2 billion. This has led to the creation or retention of more than 9,000 jobs. Over the course of these 11 years, Oneida County applicants have received the majority of this grant funding.

*The Oneida Indian Nation’s Casino Developments*

Located about 30 miles east of Syracuse and 20 miles west of Utica at NYS Thruway exit 33A, the Oneida Indian Nation’s Turning Stone Resort Casino (“Turning Stone”) is a premier four-season destination resort. Turning Stone was named “Most Excellent Golf Resort” in 2010 by Condé Nast Johansens. The Academy of Country Music named Turning Stone “Casino of the Year” in 2009. The resort offers world-class gaming, golf, entertainment, accommodations, and spa facilities, and has earned AAA Four Diamond ratings for The Lodge, The Tower Hotel, and Wildflowers restaurant.

In June 2015, the Oneida Indian Nation opened its new \$20 million Yellow Brick Road Casino in Chittenango, which created more than 100 jobs. On March 1, 2018, the Oneida Indian Nation opened the Point Place Casino in Bridgeport, located in Madison County, New York. This \$40 million investment has created approximately 200 jobs. In 2021, the Oneida Indian Nation opened The Lake House in Sylvan Beach with 100 slot machines, indoor and outdoor lakefront dining options, three bars, and an outdoor area for live entertainment, creating 60 jobs. In 2022, the Oneida Indian Nation announced yet another expansion, its largest to date, which will include another 250-room hotel, exhibition/convention space, new dining options, and additional amenities.

*Source:* Oneida County officials and Mohawk Valley EDGE, 2022 Annual Report.

**Unemployment Rate Statistics**

	<u>Yearly Average</u>							
	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Oneida County	6.2%	5.4%	4.9%	5.0%	4.4%	4.1%	7.8%	5.1%
New York State	6.3%	5.2%	4.9%	4.6%	4.1%	3.8%	9.9%	6.9%

	<u>2022 Monthly</u>									
	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>
Oneida County	4.0%	4.2%	3.9%	3.3%	3.2%	3.4%	3.8%	3.8%	3.2%	2.6%
New York State	5.3%	5.1%	4.7%	4.2%	4.1%	4.3%	4.8%	4.9%	3.9%	3.6%

*Source:* New York State Department of Labor. Not seasonally adjusted.

## Population Trends

<u>Year</u>	<u>City of Utica</u>	<u>Oneida County</u>	<u>New York State</u>
1960	100,410	264,401	16,782,304
1970	91,611	273,070	18,236,882
1980	75,632	253,466	17,558,072
1990	68,637	250,836	17,990,455
2000	60,651	235,469	18,976,457
2010	62,235	234,878	19,378,102
2015	60,912	231,264	19,594,330
2020	65,283	232,125	20,201,249
2021	64,501	230,274	19,835,913

Source: U.S. Census Bureau.

	<b>Towns</b>				
	<b>(Oneida County, except as noted)</b>				
	<u>1990</u>	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2021</u>
Deerfield	3,942	3,906	4,273	3,983	3,982
Frankfort (Herkimer County)	7,494	7,478	7,636	7,011	6,972
Kirkland	10,153	10,138	10,315	10,075	10,111
Marcy	8,685	9,469	8,982	8,777	8,915
New Hartford	21,640	21,172	22,166	21,874	21,898
Schuyler (Herkimer County)	3,508	3,385	3,420	3,296	3,311
Trenton	4,682	4,670	4,498	4,297	4,316
Westmoreland	5,737	6,207	6,138	5,924	5,888
Whitestown	<u>18,985</u>	<u>18,635</u>	<u>18,667</u>	<u>18,090</u>	<u>17,885</u>
<b>Total</b>	<u>84,826</u>	<u>85,060</u>	<u>86,095</u>	<u>83,327</u>	<u>83,278</u>

Source: US Bureau of the Census, 2021 American Community Survey 5-Year Estimate.

## Housing – Median Reported Housing Value

<u>County</u>	<u>Median Reported Housing Value</u>	<u>Percentage of State Median</u>
Albany	\$235,200	69%
Cayuga	138,200	41
Fulton	124,500	37
Monroe	160,000	47
<b>Oneida</b>	138,700	41
Oswego	115,900	34
Otsego	154,200	45
Saratoga	273,500	80
Schenectady	178,000	52
New York State	340,600	100

Source: US Bureau of the Census, 2021 American Community Survey 5-Year Estimate.

## Median Family Income

<u>Governmental Units</u>	<u>Median Family Income</u>
Town of Deerfield (Oneida County)	\$105,817
Town of Frankfort (Herkimer County)	73,430
Town of Kirkland (Oneida County)	108,869
Town of Marcy (Oneida County)	109,148
Town of New Hartford (Oneida County)	98,336
Town of Schuylers (Herkimer County)	74,167
Town of Trenton (Oneida County)	82,356
City of Utica (Oneida County)	53,333
Town of Westmoreland (Oneida County)	87,772
Town of Whitestown (Oneida County)	85,236
Oneida County	78,281
Herkimer County	79,001
New York State	92,731

Source: US Bureau of the Census, 2021 American Community Survey 5-Year Estimate.

## Employment in Non-Farm Establishments for the Utica-Rome MSA

The following information provides employment data for the Utica-Rome Metropolitan Statistical Area (“MSA”), which includes all of Oneida and Herkimer Counties. Employment statistics are not available for the area served by the Regional System as such. The smallest area for which such statistics are available which best represent the area served by the Regional System is the Utica-Rome MSA. The information set forth below is included for informational purposes only. It should not be implied from the inclusion of such data that the Utica-Rome MSA is necessarily representative of the area served by the Regional System.

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<u>Industry</u>	<u>2021 Total</u>
Accommodation and Food Services	7,693
Administrative and Waste Services	2,941
Agriculture, Forestry, Fishing & Hunting	479
All Government	28,217
Arts, Entertainment, and Recreation	841
Construction	2,966
Educational Services	332
Finance and Insurance	5,585
Health Care and Social Assistance	15,739
Information	891
Management of Companies and Enterprises	562
Manufacturing	10,688
Mining	155
Other Services, except Public Administration	3,072
Professional and Technical Services	3,784
Real Estate and Rental and Leasing	695
Retail Trade	13,245
Transportation and Warehousing	3,483
Utilities	34
Wholesale Trade	2,606
Unclassified	161

*Source:* New York State Department of Labor

### **Tax Information – City of Utica**

The following information provides tax valuations, tax collection and largest taxpayers for the City, all of which is within the area served by the Regional System. Tax information statistics are not available for the area served by the Regional System as such, but only for the governmental jurisdictions served in whole or in part by the Regional System. The information set forth below with respect to the City is included for informational purposes only. It should not be implied from the inclusion of such data that the City is necessarily representative of the entire area served by the Regional System.

#### *Valuations – City of Utica*

<u>Years Ending 3/31</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Assessed Valuation	\$1,086,951,053	\$1,098,161,682	\$1,104,062,642	\$1,112,595,719	\$1,118,110,748
Equalization Rate	68.00%	67.50%	63.03%	59.50%	54.50%
Full Valuation	\$1,598,457,431	\$1,626,906,196	\$1,751,646,267	\$1,869,908,771	\$2,051,579,354

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*Tax Collection Record – City of Utica*

<b><u>Years Ending 3/31:</u></b>	<b><u>2019</u></b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>
Total Tax Levy	\$29,422,062	\$29,133,180	\$29,844,898	\$30,075,565	\$30,224,651
Uncollected End of Year	176,531	206,799	398,381	896,063 <sup>(1)</sup>	N/A
% Uncollected	0.60%	0.71%	1.33%	2.98%	N/A

<sup>(1)</sup> Amount uncollected as of September 21, 2022.

*Ten Largest Taxpayers – 2022-2023 Fiscal Year – City of Utica*

<b><u>Name</u></b>	<b><u>Type</u></b>	<b><u>Estimated Assessed Valuation</u></b>
National Grid	Utility	\$55,329,985
Riverside Enterprises, LLC	Shopping Mall	27,729,887
AFP 101 Corp.	Hotel/Hospitality	6,600,000
Verizon	Utility	5,517,908
AMA Properties, LLC	Shopping Center	4,599,000
Eton Centers Co.	Shopping Center	3,990,000
Utica MZL, LLC	Shopping Center	3,800,100
CSX Transportation Inc.	Transportation	3,188,407
HHM Hotels	Hotel/Hospitality	3,000,000
Center Green Corp.	Professional Office Building	2,884,640

The ten largest taxpayers listed above have an estimated total assessed valuation of \$116,599,927, which represents approximately 10.43% of the tax base of the City.

**Tax Information – Oneida County**

The following information provides tax valuations, tax collection and larger taxpayers for the Oneida County, which includes the City and most of the remaining area served by the Regional System. The area served by the Regional System represents approximately 11.5% of the total area of Oneida County, and encompasses approximately 55% of the total population of Oneida County. Tax information statistics are not available for the area served by the Regional System as such. The information set forth below with respect to the Oneida County is included for informational purposes only. It should not be implied from the inclusion of such data that Oneida County is necessarily representative of the area.

*Valuations – Oneida County*

<b><u>Years Ending 12/31</u></b>	<b><u>2018</u></b>	<b><u>2019</u></b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>
Assessed Valuation	\$7,275,152,705	\$7,309,437,009	\$7,326,218,259	\$7,344,713,645	\$7,385,131,557
Equalization Rate	66.59%	65.01%	61.56%	59.73%	57.28%
Full Valuation	\$10,952,588,424	\$11,242,756,100	\$11,900,896,234	\$12,296,872,189	\$12,891,950,690

*Tax Collection Record – Oneida County*

<u>Years Ending 12/31</u>		<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Total Tax Levy	\$80,195,030	\$81,899,447	\$85,229,003	\$85,819,310	\$87,371,002	\$86,155,435
Uncollected End of Year	4,601,320	4,802,718	4,516,579	5,050,461	4,454,142	N/A
% Uncollected	5.74%	5.87%	5.30%	5.89%	5.10%	N/A

*Largest Taxpayers – 2021 Assessment Roll*

<u>Name</u>	<u>Type</u>	<u>Assessed Valuation</u>
National Grid	Utility	\$ 297,000,189
Sangertown Square LLC	Real Estate/Commercial	47,855,900
Wal-Mart	Warehouse/Commercial	41,842,100
Iroquois Gas Transmission	Utility	33,427,610
Erie Blvd Hydropower	Utility	27,832,216
Riverside Enterprises LLC	Real Estate/Commercial	27,729,887
BG New Hartford LLC	Real Estate/Commercial	26,421,200
Applewood Community, Inc.	Manufactured Housing Park	20,361,358
Verizon	Utility	18,742,360
Lowe's	Commercial	12,944,065

The ten taxpayers, listed above, have a total estimated taxable valuation of \$554,156,885 which represents 7.54% of the Oneida County tax base.



## **General Resolution**

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ACKNOWLEDGMENTS

EXHIBIT A - PROMISSORY NOTE

including Bonds and the Promissory Note, and (iii) covenanted to operate and maintain the Regional System; and

WHEREAS, the Authority has determined that the public interest will be best served and that the purposes of the Act can be more advantageously obtained by the Authority issuing bonds, notes and other obligations hereunder in one or more series pursuant to supplemental resolutions from time to time for the purposes authorized by the Act.

NOW, THEREFORE, BE IT RESOLVED by the Governing Board of the Authority as follows

In order to secure (i) the payment of principal or redemption price of and interest on all Bonds issued and Outstanding under this Resolution according to their tenor, purport and effect, (ii) all Payment Obligations, (iii) the Promissory Note, and (iv) the performance and observance of all the covenants, promises, stipulations, agreements, terms, provisions and conditions contained in the Bonds, the Promissory Note and in the Resolution (i), (ii), (iii) and (iv) collectively, the "Secured Obligations"), and for and in consideration of the purchase and acceptance of the Bonds by the Beneficial Owners in the case of Bonds issued pursuant to the Book-Entry System and Registered Owners in the case of Bonds issued in certificated form, of the acceptance by the City of the Promissory Note and of the acceptance by the Trustee of the trust hereby created, the Authority, intending to be legally bound, does hereby pledge and grant a security interest unto the Trustee and its successors in the trust and its assigns, in and to the following:

FIRST GRANTING CLAUSE

Subject only to the right of the Board to apply Revenues as provided in the Agreement, all right, title and interest of the Authority in and to Revenues.

SECOND GRANTING CLAUSE

All right, title and interest of the Authority in and to the Agreement.

THIRD GRANTING CLAUSE

All right, title and interest of the Authority in and to all money and Investment Securities from time to time held by the Trustee in any fund or account created hereunder; provided, however, that money and Investment Securities held in the Rebate Fund established under Section 5.12 hereof shall be applied solely to pay the Rebate Amount to the United States and shall not be available for the payment of any Secured Obligations and any amounts held by the Trustee to pay the purchase price of any Bonds tendered for purchase in accordance with a Supplemental Resolution shall be held exclusively for the benefit of the Registered Owners of such Bonds.

WATER SYSTEM GENERAL REVENUE BOND RESOLUTION

WHEREAS, capitalized terms shall have the meaning ascribed to them in this Resolution; and

WHEREAS, the Authority and the Board are each a body corporate and politic, constituting a public benefit corporation of the State of New York; and

WHEREAS, the Act empowers the City, acting for the City and the Utica Board of Water Supply, and any Municipality, among other things, to transfer Projects to the Board by deed, lease or other arrangement; and

WHEREAS, the Act empowers the Board, among other things, to acquire Projects from any Municipality, including the City, acting for the City and the Utica Board of Water Supply, and to establish, fix and revise, from time to time, fees, rates or other charges for the use of, or services furnished, rendered or made available by the Regional System; and

WHEREAS, the Authority is authorized under the Act to issue bonds, notes or other obligations to pay the Cost of any Project, including the acquisition of Projects by the Board from any Municipality, including the City acting for the City and the Utica Board of Water Supply, or for any other corporate purpose, including the establishment of reserves to secure the Bonds, the payment of principal of, premium, if any, and interest on the Bonds and the Promissory Note and the payment of incidental expenses in connection therewith; and

WHEREAS, the City, acting for the City and the Utica Board of Water Supply, has sold, transferred and otherwise conveyed the City's and the Utica Board of Water Supply's title and interest in the System to the Board; and

WHEREAS, in partial payment of the purchase price of the System under the Sale Agreement, the Authority has issued the Promissory Note to the City and has issued the 1996B Bonds; and

WHEREAS, the Board has, pursuant in the terms of the Agreement, leased its title and interest in the Regional System to the Authority as security for the Authority's Bonds and the Promissory Note and the Authority has appointed the Board the operator of the Regional System to permit the Board to operate and maintain the Regional System and to raise fees, rates and other charges; and

WHEREAS, pursuant to the Agreement (a) the Authority, among other things, has agreed to use its best efforts to issue the Promissory Note and use its best efforts to issue Bonds from time to time, to finance costs of the Projects described, from time to time, in the Agreement and (b) the Board, among other things, has (i) given, granted, sold and conveyed to the Authority, subject to the terms and conditions of this Resolution, the Act and the Agreement with respect to the use and application thereof, all of the Revenues derived by the Board from the operation of the Regional System, (ii) covenanted to set and collect rates, fees and charges, to the extent provided therein, sufficient to, among other things, pay the costs of operating and maintaining the Regional System and to pay the principal of and interest on the bonds, notes or other obligations of the Authority,

FOURTH GRANTING CLAUSE

Any and all other property rights and interests of every kind and nature from time to time hereafter by delivery or by writing of any kind granted, bargained, sold, alienated, demised, released, conveyed, assigned, transferred, mortgaged, pledged, hypothecated or otherwise subjected hereto, as and for additional security herewith, by the Authority or any other person on its behalf or with its written consent, and the Trustee is hereby authorized to receive any and all such property at any and all times and to hold and apply the same subject to the terms hereof.

FIFTH GRANTING CLAUSE

All rights and privileges of every kind and nature appurtenant to the properties described in First, Second, Third and Fourth Granting Clauses hereof, all proceeds thereof, and all the right, title and claim whatsoever, at law as well as in equity, which the Authority now has or may hereafter acquire in and to the property described in the above Granting Clauses, or any part thereof, whether now owned or hereafter acquired.

TO HAVE AND TO HOLD all and singular the Trust Estate sold, assigned, transferred, pledged and set over by the Authority as aforesaid or intended so to be, unto the said Trustee and its successors and assigns, forever.

IN TRUST NEVERTHELESS, upon the terms and trusts herein set forth, (i) for the equal and proportionate benefit, security and protection of all present and future Holders of the Bonds issued under and secured by this Resolution without privilege, priority or distinction as to the Lien or otherwise of any of the Bonds over any of the other Bonds except as otherwise expressly provided herein, (ii) for the benefit of any and all Credit Facility Providers as their interests may appear, and (iii) for the benefit of the holder of the Promissory Note and for the Holder of any Subordinate Indebtedness, expressly as provided herein;

PROVIDED, HOWEVER, that if the Authority shall (i) well and truly pay, or cause to be paid, all Secured Obligations, at the times and in the manner specified therefor according to the true intent and meaning thereof, or shall provide for the payment thereof as permitted hereunder and (ii) well and truly keep, perform and observe all of the Secured Obligations other than Payment Obligations to be kept, performed and observed by it, and (iii) pay or cause to be paid to the Trustee all sums of money due or to become due to it in accordance with the terms and provisions hereof, then upon such final payments and performance this Resolution and the rights hereby granted, and all interest of the Trustee in the Trust Estate, shall cease, terminate and be void, and the Trustee shall forthwith release, surrender and otherwise cancel any interest it may have in this Resolution, otherwise this Resolution to be and remain in full force and effect; and

PROVIDED, FURTHER, HOWEVER, that if there is in effect a Credit Facility issued concurrently with the delivery of each series of Bonds and being security for each series of Bonds, or any replacement thereof permitted in accordance with any Supplemental Resolution pursuant to which the applicable Bonds were issued and there is not then in existence and continuing a Credit Facility Default with respect to any such Credit Facility, the pledge of the Agreement, to the Trustee as security for the Bonds shall be terminated and of no effect only if each Credit Facility Provider shall so notify the Trustee in writing;

AND IT IS HEREBY COVENANTED AND AGREED by and between the parties hereto, that the terms and provisions upon which the Bonds are to be issued, executed, authenticated, delivered and secured, and the trusts and conditions upon which the Trust Estate is to be held and disposed of, which said trust and conditions the said Trustee hereby accepts and agrees to discharge, are as follows:

ARTICLE I  
GENERAL PROVISIONS.

SECTION 1.1. Authority for the Resolution. This Resolution is entered into by virtue of the Act and pursuant to its provisions, and the Authority has ascertained and hereby determines that each and every matter and thing as to which provision is made in this Resolution is necessary in order to further secure the payment of the principal of or interest on the Bonds and to carry out and effectuate the purposes of the Authority in accordance with the Act.

SECTION 1.2. Resolution to Constitute Contract. In consideration of the purchase and acceptance of the Bonds by the Beneficial Owners in the case of Bonds issued pursuant to the Book-Entry System and Registered Owners in the case of Bonds issued in certificated form from time to time, the provisions of this Resolution shall be deemed to be and shall constitute a contract between the Authority, the Trustee and the Registered Owners from time to time of the Bonds and the covenants and agreements herein set forth to be performed on behalf of the Authority 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 expressly provided herein.

SECTION 1.3. Scope of Resolution. Nothing in this Resolution shall limit the power of the Authority to issue obligations of the Authority outside this Resolution for any lawful purpose of the Authority or from granting liens on the Pledged Revenues which are expressly subordinate to the Lien of this Resolution or from granting liens of any priority on revenues of the Authority which are not Revenues as defined herein.

SECTION 1.4. Construction. (a) In this Resolution (except as otherwise expressly provided or unless the context clearly otherwise requires) the singular includes the plural, the masculine includes the feminine, all definitions and references to documents include all amendments or supplements thereto, and all definitions and references to persons or entities include their respective successors and assigns.

(b) Words importing the "redemption" "redeemed" or "calling for redemption" of Bonds do not include or connote the payment of Bonds at their stated maturity, or the payment of Bonds upon declaring such Bonds due and payable in advance of their maturity, or the purchase of Bonds.

(c) All references in this Resolution to designated "Articles," "Sections" and other subdivisions of this Resolution are to the designated Articles, Sections or other subdivisions of this instrument as amended from time to time. The words "herein," and "hereunder" and other

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of issuance to the first payment date, and (iii) with respect to Balloon Indebtedness, the principal component maturing or payable on one date shall be deemed to accrue in the month in which such component matures or is payable and not in monthly installments prior to such date. In all events, principal shall be determined to accrue in monthly amounts sufficient to assure the full amount due on any principal payment date and to be paid from the Debt Service and Sinking Fund will be on deposit in the Debt Service and Sinking Fund on the payment date. If an Event of Default occurs and Bonds have been declared to be due and payable as provided in this Resolution, then, in each calendar month, the entire unpaid principal of all Bonds which have been accelerated shall be deemed to have accrued in that calendar month. A Supplemental Resolution authorizing the issuance of Additional Parity Indebtedness, with the consent of each Credit Facility Provider, may modify or amend this definition of Accrued Principal with respect to such Additional Parity Indebtedness.

"Accrued Promissory Note Payment" means for any calendar month, the Annual Payment which has "accrued" or will "accrue" on the Promissory Note less any amount which has "accrued" or will "accrue" during such period on the Reimbursement Obligation and for which either the Board or the Authority has a right of set-off pursuant to the terms of the Reimbursement Obligation. For purposes of this definition, it shall be assumed that the Annual Payment on the Promissory Note accrues in twelve (12) equal monthly installments commencing on the twelfth month preceding the date on which payment is due. In all events, the Annual Payment shall be determined to accrue in monthly amounts sufficient to assure the Annual Payment due on any payment date and to be paid from the Promissory Note Fund, after taking into consideration any permitted set-off pursuant to the terms of the Reimbursement Obligation, will be on deposit in the Promissory Note Fund on the payment date.

"Act" means (i) the Upper Mohawk Valley Regional Water Finance Authority Act, being Title 10 of Article 5 of the Public Authorities Law as enacted by Chapter 647 of the Laws of 1994 of the State, as it may from time to time be amended and (ii) any rules or regulations promulgated by the Authority pursuant to the Act as the same may from time to time be modified or amended.

"Act of Bankruptcy" means with respect to any Person the occurrence of one of the following events: (a) the Person shall become insolvent or shall fail to pay its debts generally as they become due, or shall admit in writing its inability to pay any of its indebtedness; (b) the Person shall file a case under the Federal Bankruptcy Code to be declared a bankrupt or for reorganization; (c) the Person shall consent to, or petition or apply to any authority for the appointment of a receiver, liquidator, trustee or similar official for itself or for all or any part of its properties; (d) any such receiver, liquidator, trustee or similar official shall otherwise have been appointed and shall not have been removed, dismissed or stayed within sixty (60) days of such appointment; or (e) insolvency, reorganization, arrangement or liquidation proceedings (or similar proceedings) shall have been instituted by or against the Person, and if instituted against the Person, shall not have been dismissed within sixty (60) days of being instituted.

"Additional Indebtedness" means any Indebtedness incurred by the Authority and issued hereunder subsequent to the issuance of the 1996A Bonds and the 1996B Bonds. Additional Indebtedness may constitute Additional Parity Indebtedness, Subordinated Indebtedness, Credit Notes or any combination thereof.

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words of similar import refer to this Resolution as a whole and not to any particular Article, Section or other subdivision unless otherwise specified.

SECTION 1.5. Definitions. The following terms whenever used in this Resolution shall have the meanings set forth in this Section except as otherwise expressly provided or unless the context clearly requires otherwise:

"Accountant" means such independent certified public accountant or accounting firm as shall at the time be employed by the Authority for the purpose of performing the functions and duties of the independent certified public accountant under this Resolution or the Act.

"Accreted Value" means at any particular time, the value of any Capital Appreciation Indebtedness used for the purpose of determining any required principal amount for Bondholders' consents or approvals, the amount of Bonds Outstanding, the redemption price of such Indebtedness or the priority of any claim for payment of interest or principal upon the occurrence of an Event of Default, all as provided in the Supplemental Resolution authorizing the issuance of any such Capital Appreciation Indebtedness.

"Accrued Debt Service" means for any calendar month, the sum of Accrued Interest and Accrued Principal for that month for all Outstanding Bonds.

"Accrued Interest" means for any calendar month, the interest component of Debt Service Requirements which has accrued or will accrue on any particular series of Outstanding Bonds during that month less (i) any interest component which accrues during such period, which is to be paid from money or Investment Securities or the earnings thereon, which money or Investment Securities are on deposit in a separate fund or account, such as a capitalized interest subaccount, or are otherwise segregated for such purpose, and (ii) any interest which has accrued but is not due and payable within the twelve (12) month period immediately following such accrual. For purposes of this definition the interest component which has accrued but is not due and payable within the twelve (12) month period immediately following such accrual shall be included as Accrued Interest in twelve (12) equal consecutive monthly installments commencing on the twelfth month preceding the payment date. A Supplemental Resolution authorizing the issuance of Additional Parity Indebtedness, with the consent of each Credit Facility Provider, may modify or amend this definition of Accrued Interest for such Additional Parity Indebtedness.

"Accrued Principal" means for any calendar month, the principal component of Debt Service Requirements which has "accrued" or will "accrue" on a particular series of Outstanding Bonds during that month less any principal component which accrues during such period but is to be paid from money or Investment Securities or the earnings thereon which money or Investment Securities are on deposit in a separate fund or account or are otherwise segregated for such purpose. For purposes of this definition, it shall be assumed that the principal component accrues in twelve (12) equal monthly installments commencing on the twelfth month preceding the date on which payment is due, except that (i) with respect to the principal component of a series of Bonds which is payable more frequently than annually, the principal component shall accrue in equal monthly installments from one payment date to the next, (ii) if the first principal payment date on a series of Bonds is less than twelve (12) months after the issuance of such series of Bonds, the principal component due on such first payment date shall accrue in equal monthly installments from the date

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"Additional Parity Indebtedness" means any Indebtedness of the Authority incurred pursuant to Article III hereof secured by a lien on the Trust Estate on a parity basis with the 1996A Bonds and the 1996B Bonds.

"Advance-Refunded Municipal Bonds" means obligations the interest on which is excluded from gross income for purposes of federal income taxation that have been advance-refunded prior to their maturity and that are fully and irrevocably secured as to principal and interest by Government Obligations described in subparagraphs (a), (b) or (n) of the definition of Investment Securities held in trust for the payment thereof, which Advance-Refunded Municipal Bonds are rated in the highest rating category by each Rating Agency that, pursuant to the request of the Authority, maintains a credit rating with respect to such Advance-Refunded Municipal Bonds.

"Agreement" means the Financing Agreement, dated as of October 30, 1996, entered into pursuant to Sections 1226-g and 1226-h of the Act, by and among the Authority, the Board and the City, acting for the Utica Board of Water Supply and the City, and as the same may be from time to time amended or supplemented.

"Annual Budget" means the budget or amended budget for a Fiscal Year, as adopted by the Board in accordance with the Agreement as may be in effect from time to time.

"Authority" means the Upper Mohawk Valley Regional Water Finance Authority, a body corporate and politic constituting a public benefit corporation created and existing under and by virtue of the Act.

"Authority Budget" shall mean the annual budget of the Authority, as amended or supplemented, adopted or in effect for a particular Fiscal Year, as provided in Section 9.7 hereof.

"Authority Expenses" means all reasonable or necessary current expenses of the Authority, including all salaries, administrative, general, commercial, engineering, including all fees and expenses of the Engineer, advertising, public notice, auditing and legal expenses, insurance and surety bond premiums, fees paid to banks, insurance companies or other financial institutions for the issuance of Credit Facilities, compensation and expenses of the Trustee (including those of its counsel) and any remarketing fees and expenses with respect to any Bonds, consultants' fees, including all fees and expenses of the Rate Consultant, and charges, payments to pension, retirement, health and hospitalization funds, costs of public hearings, ordinary and current rentals of equipment and other property, lease payments for real property or interests therein, expenses, liabilities and compensation of any Fiduciary and all other expenses necessary, incidental or convenient for the efficient operation of the Authority.

"Authorized Denominations" means (i) with respect to the 1996A Bonds and the 1996B Bonds, a minimum denomination of \$5,000 and integral multiples thereof and (ii) with respect to any Additional Indebtedness, a minimum denomination specified in the Supplemental Resolution under which such Additional Indebtedness is issued.

"Authorized Newspaper" means a newspaper selected by the Trustee printed in the English language and customarily published at least five (5) days each week and generally circulated within the Borough of Manhattan, City and State of New York, and when successive publications in an

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Authorized Newspaper are required, they may be made in the same or different Authorized Newspapers.

"Authorized Representative" or "Authorized Officer" means, with respect to either the Authority or the Board, the Chairperson, Vice Chairperson, Treasurer or Secretary thereof, or any other officer or person authorized to perform specific acts or duties by resolution duly adopted by the members of the Authority or the Board, as the case may be, and in the case of any Credit Facility Provider, the President or any Vice President of the Credit Facility Provider, or any other officer authorized to perform specific acts or duties by resolution duly adopted by the Board of Directors, or relevant committee thereof, of the Credit Facility Provider.

"Balloon Indebtedness" shall mean Indebtedness fifty percent (50%) or more of the initial principal amount of which matures or is payable at the option of the holders thereof on the same date, which portion of the principal is not required by the documents governing such Indebtedness to be amortized by redemption prior to such date. In calculating the Debt Service Requirement for purposes of determining the Debt Service Reserve Requirement or compliance with Additional Parity Indebtedness requirements, the Debt Service Requirement for such Indebtedness during such Fiscal Year shall be determined in accordance with the provisions of the Supplemental Resolution authorizing the issuance of such Balloon Indebtedness.

"Beneficial Owners" means purchasers of Bonds whose ownership interest is evidenced only in the Book-Entry System maintained by the Depository.

"Board" shall mean the Upper Mohawk Valley Regional Water Board, a body corporate and politic constituting a public benefit corporation authorized to be created under the Act and created by special act of the State Legislature.

"Bond" or "Bonds" means the 1996A Bonds, the 1996B Bonds and any Additional Parity Indebtedness issued pursuant to this Resolution.

"Bond Counsel" means Willkie Farr & Gallagher or any other nationally recognized counsel experienced in matters of municipal law and the tax-exempt status of obligations under the Code, acceptable to the Authority.

"Bondholder," "Holder," "holder" and "Registered Owner" means the Depository or its nominee, if the Book-Entry System maintained by the Depository pursuant to Section 2.6 is in effect, or the person in whose name any Bond is registered in the Bond Register System maintained by the Trustee pursuant to Section 2.7 hereof.

"Bond Redemption and Accumulated Surplus Fund" means the fund so designated which is created by Section 5.11 hereof.

"Bond Register System" means a system of Ownership and transfer of Bonds registered on the registration books of the Authority kept for that purpose by the Trustee, as Bond register.

"Book-Entry System" means a system for clearing and settlement of securities transactions among participants of a Depository (and other parties having custodial relationships with such participants) through electronic or manual book-entry changes in accounts of such participants

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or liquidity for the payment of the principal or purchase price of or interest on any series of Bonds or any portion thereof, and includes any Reserve Fund Credit Facility.

"Credit Facility Bonds" means those Bonds which are purchased from funds drawn under a Credit Facility by the Trustee during the period of time that such Bonds are not remarketed and are held by or for the account of any Credit Facility Provider.

"Credit Facility Default" means either (i) failure by the Credit Facility Provider to pay any claim or draw under the Credit Facility when due in accordance with its terms or (ii) Act of Bankruptcy of the Credit Facility Provider.

"Credit Facility Provider" means the provider of any Credit Facility, and includes any Reserve Fund Credit Facility Provider. With respect to the 1996A Bonds, the Credit Facility Provider shall be Financial Security Assurance Inc., a New York stock insurance company, or any successor thereto or assignee thereof.

"Credit Note" means the promissory note or other instrument or agreement evidencing or setting forth the Authority's obligations to a Credit Facility Provider pursuant to a Credit Agreement.

"Debt Service and Sinking Fund" means the fund so designated which is established pursuant to Section 5.5 of this Resolution.

"Debt Service Requirements" means, with reference to any specified period, the amounts required to be paid by the Authority to the Trustee for the holders of all Indebtedness (or any trustee or paying agent for such holders) in respect of the principal of all Indebtedness (including mandatory redemptions or prepayments) and the interest thereon, and the amounts required to be paid by the Authority as lease rentals in respect of Indebtedness in the form of capitalized leases provided that, for the purposes of the foregoing:

(a) The amount deemed payable by the Authority in respect of interest on any Indebtedness shall not include interest funded and available from the proceeds thereof or, upon initial issuance, any accrued interest; and

(b) The amount deemed payable by the Authority in respect of the principal of and interest on any Balloon Indebtedness, Capital Appreciation Indebtedness, or Variable Rate Indebtedness shall be calculated and, to the extent required, recalculated as provided in this Resolution.

"Debt Service Reserve Fund" means the fund so designated which is established pursuant to Section 5.8 of this Resolution.

"Debt Service Reserve Requirement" means with respect to a particular date, the lesser of: (a) the maximum annual Debt Service Requirements with respect to the Outstanding Bonds in the then current and all future Fiscal Years (for the purposes of which calculation any Variable Rate Indebtedness shall be calculated pursuant to the Supplemental Resolution pursuant to which the Indebtedness has been issued); (b) 125% of the average annual Debt Service Requirements with respect to the Outstanding Bonds in the then current and all future Fiscal Years (for the purposes of

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maintained by the Depository for recording ownership of the Bonds by Beneficial Owners and transfers of ownership interests in the Bonds.

"Business Day" or "business day" means any day (other than Saturday or Sunday) during which (i) commercial banks located in the State or in any of the cities in which the Principal Office of the Trustee or the office of any then current Credit Facility Provider at which a draw or claim on the Credit Facility is to be made are located are not required or authorized by law to close; and (ii) The New York Stock Exchange, Inc. is not closed.

"Capital Appreciation Indebtedness" means any Additional Indebtedness with a stated value at maturity, the interest on which is not payable until maturity or earlier redemption. In calculating the Debt Service Requirement in any Fiscal Year for Capital Appreciation Indebtedness for purposes of determining the Debt Service Reserve Requirement or compliance with Additional Parity Indebtedness requirements, the Debt Service Requirement for such Indebtedness during such Fiscal Year shall be determined in accordance with the provisions of the Supplemental Resolution authorizing the issuance of such Capital Appreciation Indebtedness.

"City" means the City of Utica, Oneida County, New York.

"Code" means the Internal Revenue Code of 1986, as amended, and with respect to a specific section thereof, such reference shall be deemed to include (i) the regulations promulgated under such section, (ii) any successor provision of similar import hereafter enacted, (iii) any corresponding provisions of any subsequent Internal Revenue Code, (iv) the regulations prescribed under the provisions described in (ii) and (iii), and (v) any published revenue rulings applicable thereto.

"Construction Fund" means the fund so designated which is established pursuant to Section 4.1 of this Resolution.

"Cost" or "Costs" or "Costs of the Project" means "Cost" as defined in the Act.

"Costs of Issuance" means any costs relating to the issuance of Bonds of any series of Bonds, including, without limitation, costs pertaining to credit enhancement, underwriting or placement fees, expenses and discounts, attorneys' fees and expenses, printing and advertising expenses, fees and expenses of consultants and governmental or administrative fees and expenses.

"Counsel" means an attorney at law or law firm (who may be counsel for the Authority, the Trustee or a Credit Facility Provider).

"County of Oneida" means the County of Oneida, New York, a municipal corporation having an office in Utica, New York.

"Credit Agreement" means any agreement pursuant to which a Credit Facility is issued or provided for.

"Credit Facility" or "Credit Facilities" means any credit enhancement, guaranty, letter of credit, insurance policy, surety bond, standby bond purchase agreement or other credit facility or liquidity facility, and any extension or renewal thereof which is delivered to the Trustee as security

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which calculation any Variable Rate Indebtedness shall be calculated pursuant to the Supplemental Resolution pursuant to which the Indebtedness has been issued); and (c) the maximum amount that may be held in the Debt Service Reserve Fund, in the opinion of Bond Counsel to the Authority, with respect to a series of Bonds intended to be tax-exempt without adversely affecting the Tax-Exempt status of such Bonds. The Debt Service Reserve Requirement may be satisfied in whole or in part by a Reserve Fund Credit Facility. For purposes of calculating the Debt Service Reserve Requirement, the cost of any applicable Credit Facility shall be included as if it were interest on the Bonds of the related series of Bonds.

"Depository" means The Depository Trust Company, New York, New York, or any other entity performing substantially the same function under a Book-Entry System, and any successor depository designated pursuant to Section 2.6 hereof.

"Eastern Time" means the prevailing local time in the City of New York, New York.

"Engineer" means such engineer or firm of engineers of recognized standing having skill and experience with respect to the design, construction or operation of a facility similar to and having like characteristics as a Facility, registered in the State as shall be at the time employed by the Authority for the purpose of performing the function and duties of an engineer under this Resolution or the Act and not unsatisfactory to the Trustee or any Credit Facility Provider. Except as otherwise expressly provided herein, the Engineer shall be Independent of the Authority.

"Event of Default" means any of the events described in Section 10.1 of this Resolution.

"Federal Bankruptcy Code" means Title 11 of the United States Code.

"First Supplemental Resolution" means the Supplemental Resolution, dated as of December 1, 1996, by and between the Authority and the Trustee that is supplemental hereto and relates to the 1996A Bonds.

"Fiscal Year" means the period of twelve months beginning April 1 of each year and ending on March 31 of the next succeeding year, or any other twelve (12) month period adopted hereafter from time to time by either the Authority or the Board as its fiscal year for accounting purposes.

"Generally Accepted Accounting Principles" shall mean those accounting principles applicable in the preparation of financial statements of municipalities, authorities, or corporations as appropriate, as promulgated by the Financial Accounting Standards Board or such other body recognized as authoritative by the American Institute of Certified Public Accountants or any successor body.

"Governing Board" means the members of the Authority constituting and acting as the governing body of the Authority.

"Government Obligations" means United States Treasury bills or other interest-bearing direct obligations of (including obligations issued or held in book entry form on the books of the Department of the Treasury of the United States of America), or obligations the principal and interest of which are unconditionally guaranteed as to full and timely payment by, the United States

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of America, but not mutual funds (including unit investment trusts) investing in such obligations other than money market funds that are rated in the highest category by Moody's and S & P.

"Indebtedness" means, as to the Authority, at a particular time, all items which would, in conformity with Generally Accepted Accounting Principles, be classified as liabilities on a balance sheet of the Authority at such time, but in any event including without limitation (a) indebtedness arising under acceptance facilities or in respect of all letters of credit issued for the account of the Authority and, without duplication, all drafts drawn thereunder, (b) obligations under leases which have been, or under Generally Accepted Accounting Principles are required to be, capitalized, and (c) all indebtedness secured by (or for which the holder of such indebtedness has the right to be secured by) any mortgage, deed of trust, pledge, security interest or other lien, charge or encumbrance upon property owned or acquired subject to such mortgage, deed of trust, pledge, security interest, lien, charge or encumbrance, whether or not the liabilities secured thereby have been assumed. Indebtedness shall not in any event include (a) current obligations payable from current revenue, including current payments for the funding of pension or other employee benefit plans (which shall be considered Operating Expenses) but shall include the current portion of Indebtedness classified as a current obligation under Generally Accepted Accounting Principles; (b) obligations under contracts for supplies, services and pensions, allocable to current operating expenses of future years in which the supplies are to be furnished, the services rendered or the pension benefits paid (which shall be considered Operating Expenses in such future years); and (c) rentals payable in future years under leases, other than leases properly capitalized under Generally Accepted Accounting Principles (which shall be considered Operating Expenses in such future years).

"Independent" means a Person who is not an officer, director or employee of a Credit Facility Provider or a member, officer or employee of the Authority or the Board; provided, however, that the fact that such Person is retained regularly by or transacts business with the Authority or the Board or the Credit Facility Provider shall not make such Person an employee within the meaning of this definition.

"Interest Payment Date" means for Bonds of a series of Bonds the date on which interest on such Bonds is payable according to the Supplemental Resolution pursuant to which such Bonds were issued.

"Investment Securities" means and includes any of the following:

(a) Government Obligations;

(b) Government Obligations which have been stripped of their unmatured interest coupons and interest coupons stripped from either Government Obligations or obligations of the Resolution Trust Company, which interest coupons are guaranteed by the United States of America;

(c) Bonds, debentures, notes or other evidence of indebtedness issued by any of the following: Federal Home Loan Banks, Federal Home Loan Mortgage Corporation, Federal National Mortgage Association, Government National Mortgage Association, Bank for Cooperatives, Federal Intermediate Credit Banks, Federal Financing Bank, Export-Import Bank of the United States, or Federal Land Banks, or of the Resolution Trust Company;

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(d) All other obligations issued or unconditionally guaranteed as to the timely payment of principal and interest by an agency or person controlled or supervised by and acting as an instrumentality of the United States government pursuant to authority granted by Congress;

(e) (i) Interest-bearing time or demand deposits, certificates of deposit, or other similar banking arrangements with any government securities dealer, bank, trust company, savings and loan association, national banking association or other savings institution (including the Trustee), provided that such deposits, certificates, and other arrangements are fully insured by the Federal Deposit Insurance Corporation or any successor federal deposit insurance corporation or entity or (ii) interest-bearing time or demand deposits or certificates of deposit with any bank, trust company, national banking association or other savings institution (including the Trustee), provided such deposits and certificates are in or with a bank, trust company, national banking association or other savings institution which either (A) has an unsecured, uninsured and unguaranteed obligation rated "Prime-1" or "A3" or better by Moody's and "A-1" or "A-" or better by S & P or (B) is the lead bank of a parent bank holding company with an unsecured, uninsured and unguaranteed obligation meeting the rating requirements in (e)(ii)(A) above, and provided further that with respect to (i) and (ii) any such obligations are held by the Trustee or a bank, trust company or national banking association other than the issuer of such obligations (unless the issuer is the Trustee);

(f) Repurchase agreements or investment agreements collateralized by securities described in subparagraphs (a), (b), (c) or (d) above or (l) or (m) below, to the extent that any municipal bonds are rated in the highest rate category of one or more Rating Agency, with any registered broker/dealer subject to the Securities Investors' Protection Corporation or that is an approved Federal Reserve Bank primary dealer or with any commercial bank (including the Trustee), provided that (1) a specific written repurchase agreement or investment agreement governs the transaction, (2) the securities, free and clear of any lien, are held by the Trustee or an independent third party acting solely as agent for the Trustee, and such third party is (a) a Federal Reserve Bank, or (b) a bank which is a member of the Federal Deposit Insurance Corporation and which has combined capital, surplus and undivided profits of not less than \$25 million, and the Trustee shall have received written confirmation from such third party that it holds such securities, free and clear of any lien, as agent for the Trustee, (3) a perfected first security interest under the Uniform Commercial Code, or book entry procedures described in 31 CFR 306.1 et seq. or 31 CFR 350. et seq., in such securities is created for the benefit of the Trustee, (4) the Trustee will value the collateral securities no less frequently than monthly and will liquidate the collateral securities if any deficiency in the required collateral percentage is not restored within two (2) Business Days of such valuation, or, in the case of a repurchase agreement, the agreement has a term of thirty (30) days or less, (5) the fair market value of the collateral securities in relation to the amount of the repurchase obligation or the payment obligation, depending on whether it is a repurchase agreement or an investment agreement, including principal and interest, is equal to at least 100% and (6) the collateral was not acquired by the broker/dealer pursuant to a repurchase agreement or reverse repurchase agreement;

(g) Uncollateralized investment agreements issued or guaranteed by entities with debt obligations of comparable or longer maturity that are rated "A3" or better by Moody's and "A-" or better by S & P;

(h) Money market funds rated "Am" or "Am-G" or better by Moody's and S & P;

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(i) Commercial paper rated "Prime-1" or better by Moody's and "A-1" or better by S & P;

(j) Obligations rated "A3" or better by Moody's and "A-" or better by S & P;

(k) Shares of investment companies or cash equivalent investments which are authorized to invest only in assets or securities described in subparagraphs (a), (b), (c) and (d) above; provided, however, that investment in obligations described in this clause (i) shall not exceed \$500,000;

(l) Advance-Refunded Municipal Bonds;

(m) Tax-Exempt Obligations that are rated "A-3" or better or V-MIG 1 by Moody's and "A-" or better or A-1 by S & P, or shares of investment companies that invest only in such obligations;

(n) Certificates that evidence ownership of the right to payments of principal of or interest on Government Obligations, provided that (1) such obligations shall be held in trust by a bank or trust company or national banking association meeting the requirements for a successor Trustee under this agreement, (2) the owner of the investment is the real party in interest and has the right to proceed directly and individually against the obligor of the underlying Government Obligations, and (3) the underlying Government Obligations are held in a special account separate from the custodian's general assets, and are not available to satisfy any claim of the custodian, any person claiming through the custodian or any person to whom the custodian may be obligated; and

(o) The Trustee's "cash sweep account" or other short term investment fund of the Trustee, the assets of which consist of other Investment Securities defined above.

"Lien" means any sale, transfer, assignment, disposition, mortgage, pledge, security interest, lien, judgment lien, easement or other encumbrance on title, excluding Permitted Encumbrances.

"Moody's" means Moody's Investors Service, Inc., New York, New York, its successors and assigns, or if such corporation dissolves or no longer performs the functions of a securities rating agency, such other nationally recognized securities rating agency designated by the Authority and not unacceptable to either the Trustee or any Remarketing Agent.

"Municipality" means any county, city, town, village, special or improvement district under the Town Law or the County Law, any other such instrumentality, including any agency, or public corporation of the State and the Utica Board of Water Supply, or any of the foregoing or any combination thereof located or operating within or partly within the "Service Area", as such term is defined in the Act.

"1986 Code" means the Code.

"1996A Bonds" means the Authority's \$25,575,000 original aggregate principal amount Water System Revenue Bonds, Series 1996A issued pursuant to this Resolution as further provided in the First Supplemental Resolution.

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"1996B Bonds" means the Authority's \$2,725,000 original aggregate principal amount Water System Revenue Bonds, Series 1996B issued pursuant to this Resolution as further provided in the Second Supplemental Resolution and any Water System Revenue Bonds issued in amendment, modification, replacement, reissuance or refunding thereof as authorized or required by "E.F.C." pursuant to the "Project Loan and Financing Agreement", as such quoted terms are defined in the Second Supplemental Resolution.

"Non-Purpose Obligations" shall have the meaning given such term under Section 1.148-1(b) of the Income Tax Regulations of the United States Department of the Treasury.

"Officer's Certificate" means a certificate or statement signed by an Authorized Representative or Authorized Officer of the Authority, or, as the context may require, of the Credit Facility Provider.

"Operating Expenses" means the expenses reasonably incurred or to be incurred by the Board in connection with the operation of the Regional System, including, without limitation, all reasonable costs of operating, maintaining, insuring or repairing the Regional System as may be necessary or proper to maintain adequate service, fees and expenses reasonably incurred or to be incurred by the Board payable by the Board to other Persons in connection with operating the Regional System, all taxes imposed upon the Board or its assets or properties, auditing fees, legal fees, engineering fees, financial advisory fees, office expenses, general administrative and management expenses, provided, however, that Operating Expenses shall not include depreciation on the Regional System or any part thereof or any other non-cash charge, interest or principal on Indebtedness or Payment Obligations.

"Operating Fund" means the fund so designated which is described in Section 5.3 of this Resolution.

"Operating Revenues" means for any period the Revenues of the Board derived from the operation of the Regional System, excluding any extraordinary gain or loss resulting from the extinguishment of Indebtedness, the sale of capital assets, the proceeds of insurance claims, except business interruption insurance, and settlements and of condemnation awards or payments in lieu thereof, and the proceeds of any Indebtedness, all determined in accordance with Generally Accepted Accounting Principles.

"Outstanding," when used with reference to a series of Bonds, shall, subject to the provisions of the Resolution, mean as of any particular time all of the Bonds authenticated and delivered by the Trustee under the Resolution, except:

(a) Bonds theretofore canceled by the Trustee or delivered to the Trustee for cancellation;

(b) Bonds for the payment or redemption of which money in the necessary amount shall have been deposited with the Trustee, and with respect to Bonds to be redeemed prior to maturity, notice of such redemption shall have been given or provided for as provided in the Resolution;

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(c) Bonds in substitution for which other Bonds shall have been authenticated and delivered pursuant to the terms of the Resolution; and

(d) Bonds which are deemed to have been paid pursuant to the provisions of Article XV hereof.

"Paying Agent" shall mean the Trustee or any other or successor Paying Agent appointed in accordance with any Supplemental Resolution.

"Payment Date" or "payment date" means, (a) with respect to payments of principal of or interest on the 1996A Bonds, the 1996B Bonds or any Additional Indebtedness, including upon the redemption of any of the same, such dates as may be specified in the applicable Supplemental Resolution and (b) in the case of payments to Bondholders after the occurrence of an Event of Default, such other date or dates as the Trustee shall establish for the payment of principal or interest.

"Payment Obligations" means all amounts due and owing to a Credit Facility Provider under a Credit Agreement.

"Permitted Encumbrances" means, as of any particular time, (i) leases, encumbrances, mortgages, easements or rights of way with respect to real estate of the Authority or the Board which the Authority or the Board, respectively, has determined by resolution to be necessary or desirable in connection with the development of Projects, (ii) liens for ad valorem taxes, assessments or other governmental charges, permitted to exist as provided herein or not then delinquent, (iii) any mortgage or security agreement securing any Credit Facility Provider as permitted herein, (iv) any Lien created under this Resolution, (v) existing utility, access and other easements and rights of way, restrictions and exceptions and future encumbrances of like nature not arising out of the borrowing of money or the securing of advances of credit which will not interfere with or impair the operation of the property for its intended purpose, (vi) liens arising in connection with workers' compensation, unemployment insurance, old age pensions and social security benefits and liens securing appeal and release bonds, provided that adequate provision for the payment of all such obligations has been made by the Authority or the Board, (vii) attachment and judgment liens, so long as the same are being contested in good faith and by appropriate legal proceedings, (viii) any mechanic's, laborer's, materialman's, supplier's or vendor's lien or right or purchase money security interest in respect thereof if payment is not yet due and payable under the contract in question or which is being contested in accordance with the provisions hereof and which is bonded if and to the extent required by law, including without limitation the General Municipal Law, (ix) those matters which were in existence at the time of the issuance of the 1996A Bonds or the 1996B Bonds, and (x) such minor defects, irregularities, encumbrances, easements, rights of way, and clouds on title as normally exist with respect to properties similar in character to the property and as do not, in the opinion of Counsel, have a materially adverse effect on the use of the property for the purposes intended.

"Person" means an individual, a corporation, a partnership, an association, a joint stock company, a trust, any unincorporated organization, a governmental body, political subdivision, municipality or authority or any other group or entity.

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"Rating Agencies" means S & P, Moody's, or any other nationally recognized credit rating agency, to the extent that such entity then maintains a credit rating with respect to the relevant security.

"Rebate Amount" means all interest income and profits earned on the investment of the proceeds of Tax-Exempt Bonds which is required to be paid to the United States under Section 148(f) of the Code, calculated and determined in accordance with the Regulations in effect from time to time under that Section.

"Rebate Fund" means the separate fund created under Section 5.12 hereof.

"Record Date" means, as the case may be, (i) the Record Date for payment of the purchase price, principal or interest on a series of Bonds as provided in the Supplemental Resolution pertaining to such series of Bonds or (ii) the record date established by the Authority in accordance with Section 13.2 hereof for obtaining consents from bondholders.

"Regional System" means the "Properties", as defined in the Act, being the aggregate of all of the Projects.

"Registered Owner" means the Depository or its nominee, if the Book-Entry System maintained by the Depository pursuant to Section 2.6 is in effect, or the person in whose name any Bond is registered, if the Bond Register System maintained by the Trustee pursuant to Section 2.7 hereof is in effect.

"Reimbursement Obligation" means the City's obligation to reimburse the Board for the retention by the City of one million dollars (\$1,000,000) from the amount on deposit to the credit of the "Capital Improvement Program" at the time the System was transferred by the City to the Board, which amount was a cash asset of the System, pursuant to the Sale Agreement.

"Remarketing Agent" means the person or entity appointed as such under any Supplemental Resolution with respect to the Bonds of the series of Bonds authorized thereunder.

"Repair and Improvement Fund" means the fund by that name established by Section 5.10 hereof.

"Repair Reserve Requirement" means five hundred thousand dollars (\$500,000).

"Reserve Fund Credit Facility" means the letter of credit, insurance policy or surety bond, together with any substitute or replacement therefor, if any, complying with the provisions of Section 5.9 hereof, thereby fulfilling all or a portion of the Debt Service Reserve Requirement.

"Reserve Fund Credit Facility Provider" means any provider of a Reserve Fund Credit Facility.

"Resolution" means this instrument, together with all modifications hereof and amendments and supplements hereto.

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"Pilot Payments" means those payments in lieu of taxes required to be paid by the Board pursuant to subdivision three of Section 1226-r of the Act, as the same shall be amended from time to time.

"Pilot Payments Fund" means the fund by that name established by Section 5.7 hereof.

"Pledged Revenues" means all Revenues which have been pledged to the Trustee under this Resolution by the Granting Clauses hereof, whether or not they are held by the Trustee or its agent.

"Prime Rate" means the rate of interest publicly announced from time to time in The Wall Street Journal as the "prime rate" for major commercial banks, with the Prime Rate for any given calendar month being calculated by using the Prime Rate in effect as of the first day of such month.

"Principal Office," when referring to the Trustee or any Paying Agent, means the office where any such institution maintains its principal corporate trust office, and when referring to a Credit Facility Provider means the office at which a demand for payment must be made,

"Project" means any Water Facility, as such term is defined in the Act, operated by or on behalf of the Board.

"Project Budget" means a statement, and any amendments thereof, of the estimated Costs of a Facility, as set forth in an Officer's Certificate of the Board, setting forth the Costs in such categories and reasonable detail as shall be satisfactory to the Trustee and any Credit Facility Provider.

"Promissory Note" means that certain promissory note delivered by the Authority to the City in the principal amount of seven million dollars (\$7,000,000) as partial compensation for the sale of the System to the Board pursuant to the Sale Agreement, in the form attached hereto as Exhibit A, which Promissory Note is expressly subordinated to the Lien of the Pledged Revenues securing the Bonds.

"Promissory Note Fund" means the fund by that name established by Section 5.6 hereof.

"Purchase Agreement" means an agreement, which may amend or supplement the Agreement, providing for the acquisition and financing of a Project entered into by any Municipality, the Board and the Authority under Section 1226-h of the Act.

"Rate Consultant" shall mean an Independent accountant or firm of independent accountants, or a management consultant or firm of management consultants, or independent engineer or firm of independent engineers which, in any case, shall be of recognized standing in the field of water and sewer system consulting (and who may be the firm then serving as the Engineer), selected by the Authority and satisfactory to the Board.

"Rate Covenant" means the covenant of the Board contained in Section 6.1 of the Agreement to establish and collect rates, rents, fees and other charges in each Fiscal Year so that Revenues collected in such Fiscal Year of the Board, together with other available funds, will be at least equal to certain specified amounts as therein provided:

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"Revenues" means all rates, fees, charges and other income and receipts derived from the operation of the Regional System including, without limiting the generality of the foregoing, investment proceeds and proceeds of insurance, condemnation, and sale or other disposition of assets, together with all federal, State or municipal aid, if any.

"Revenue Fund" means the fund so designated which is described in Section 5.2 of this Resolution.

"Sale Agreement" shall mean that certain Sale Agreement, pursuant to which the City, acting for the City and the Utica Board of Water Supply, has sold, transferred and otherwise conveyed the City's and the Utica Board of Water Supply's title and interest in the System to the Board.

"Second Supplemental Resolution" means the Supplemental Resolution, dated as of \_\_\_\_\_, 1996, by and between the Authority and the Trustee that is supplemented hereto and relates to the 1996B Bonds, as the same may be amended, modified, replaced or superseded to provide for the 1996B Bonds as the same may be amended, modified, replaced, reissued or refunded as authorized or required by "E.F.C." pursuant to the "Project Financing and Loan Agreement", as such quoted terms are defined in the Second Supplemental Resolution.

"Secured Obligations" means the various obligations secured by this Resolution as described in the granting clauses hereto.

"S & P" means Standard & Poor's Corporation, New York, New York, its successors and assigns, or if such corporation dissolves or no longer performs the functions of a securities rating agency, such other nationally recognized securities rating agency designated by the Authority and not unacceptable to either the Trustee or the remarketing agent, if any.

"Sinking Fund Installments" means for any Fiscal Year and any series of Bonds, the principal amount thereof subject to mandatory redemption pursuant to Section 5.5 hereof.

"Special Operating Fund" means the fund by that name established by Section 5.4 hereof.

"State" means the State of New York.

"Stated Amount" means the amount set forth in any Credit Facility as the maximum amount the Trustee is permitted to draw from said Credit Facility, in respect of both principal and interest, as such amount is reduced and reinstated from time to time in accordance with the terms of the Credit Facility.

"Subordinated Indebtedness" means any Indebtedness of the Authority, excluding the Promissory Note, secured by a Lien on the Pledged Revenues that is by its terms expressly subordinated to the Lien on the Pledged Revenues securing the Bonds.

"Supplemental Resolution" means any Resolution amending, modifying or supplementing this Resolution made, signed and becoming effective in accordance with the terms hereof.

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"System" shall mean the Projects owned by the City or the Utica Board of Water Supply which constitutes a water supply, transmission and distribution system.

## ARTICLE II

"Tax-Exempt" means, with respect to interest on any obligations of a state or local government or public instrumentality, including Bonds, that such interest is excluded from gross income for federal tax purposes (other than for an owner who is a "substantial user" of the project being financed or a "related person" within the meaning of Section 147(a) of the Code), whether or not such interest is includable as an item of tax preference or otherwise includable directly or indirectly for purposes of calculating other tax liabilities, including any alternative minimum tax or environmental tax under the Code. The Trustee may conclusively rely on an opinion of Independent Counsel experienced in the field of Tax-Exempt obligations to the effect that a particular series of Bonds is Tax-Exempt.

"Tender Agent" means the person or entity designated as such in a Supplemental Resolution.

"Trust Estate" means the revenue, receipts, property, and rights and interest of the Authority which are subject to the Lien of this Resolution.

"Trustee" means United States Trust Company of New York, in its capacity as trustee under this Resolution, or its successors in the trust.

"Utica Board of Water Supply" means that Department of the City of Utica historically responsible within the City for the operation of the System.

"Variable Rate Indebtedness" means any Bond, the rate of interest on which is subject to change prior to maturity and which cannot be determined in advance of such change, including but not limited to Bonds in a commercial paper mode. In calculating the Debt Service Requirement for purposes of compliance with Additional Parity Indebtedness requirements, such Variable Rate Indebtedness shall be deemed to be Indebtedness bearing interest calculated pursuant to the Supplemental Resolution pursuant to which the Indebtedness has been issued. Any ongoing liquidity activity charges and remarketing agent fees imposed in connection with such Variable Rate Indebtedness shall be deemed to be Operating Expenses.

The words "hereof," "herein," "hereto," "hereby" and "hereunder" (except in the form of Bond) refer to the entire Bond Resolution.

SECTION 1.6. Form of Documents. Every "request," "order," "demand," "application," "requisition," "appointment," "notice," "statement," "certificate," "consent," or similar action hereunder by the Authority, unless the form thereof is specifically provided, shall be in writing signed by an Authorized Representative or Authorized Officer.

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The principal amount of the Bond and any redemption premium shall be paid to the Registered Owner thereof upon the surrender of the Bond at the principal corporate trust office of the Trustee.

SECTION 2.3. Execution of Bonds. All Bonds issued hereunder shall be executed in the name of the Authority by the manual or facsimile signature of its Chairperson, and an actual impression or facsimile of the corporate seal shall be thereunto affixed and attested by the manual or facsimile signature of its Secretary (or in either case such other officer as may be designated by the Authority). Any such Bonds may be authenticated, issued and delivered notwithstanding that one or more of the officers signing such Bonds or whose facsimile signature shall be upon such Bonds or any thereof, shall have ceased to be such officer or officers at the time when such Bonds shall actually be delivered, and although at the nominal date of the Bonds any such person shall not have been such officer of the Authority.

SECTION 2.4. Authentication of Bonds. No Bonds shall become valid or obligatory for any purpose until such Bonds shall have been authenticated by the Trustee, and such authentication by the Trustee upon any Bond shall be conclusive evidence and the only evidence that the Bond so authenticated has been duly authenticated pursuant to the written direction of the Authority and delivered hereunder and that the Registered Owner thereof is entitled to the benefit of the trust and lien hereby created.

SECTION 2.5. Bonds Are Negotiable Instruments. The Bonds shall have the qualities of negotiable instruments under the merchant law and the negotiable instruments law of the State, as well as the Uniform Commercial Code as adopted by the State, subject to the provisions for registration and transfer contained in Section 2.6 and in the Bonds.

SECTION 2.6. Transfer and Exchange of Bonds; Book-Entry System. (a) Except as provided in this Section 2.6 or in Section 2.7, each series of Bonds shall be subject to the Book-Entry System of ownership and transfer. Each series of Bonds subject to the Book-Entry System of ownership and transfer shall initially be evidenced by one certificate for each maturity, in an amount equal to the aggregate principal amount thereof. The Bonds so initially delivered shall be registered in the name of "Cede & Co." as nominee for the Depository. The Bonds subject to the Book-Entry System of ownership and transfer may not thereafter be transferred or exchanged on the registration books of the Authority held by the Trustee as bond registrar except:

- (i) to any successor Depository designated pursuant to (b) below;
- (ii) to any successor nominee designated by a Depository; or
- (iii) if the Authority shall, by resolution, elect to discontinue the Book-Entry System pursuant to (b) below, the Authority will cause the Trustee to authenticate and deliver replacement Bonds in fully registered form to such persons, and in such authorized denominations, as may be designated by the Depository, but without any liability on the part of the Trustee or the Authority for the accuracy of such designation; thereafter the provisions of Section 2.7 above regarding registration, transfer and exchange of Bonds shall apply.

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### CONCERNING THE BONDS.

SECTION 2.1. Authorization of Bonds. (a) There shall be initially issued hereunder \$25,575,000 Water System Revenue Bonds, Series 1996A, and \$2,725,000 Water System Revenue Bonds, Series 1996B as more particularly described in the First and Second Supplemental Resolutions. The 1996A Bonds and the 1996B Bonds (or any amendment, modification, replacement, reissuance or refunding of the 1996B Bonds as may be authorized or required by the "Project Financing and Loan Agreement" between the Authority and "E.F.C." relating to the "Project" financed with the 1996B Bonds, as such quoted terms are defined in the Second Supplemental Resolution) shall each be issued for such purposes, shall be in such form and denomination, shall bear such dates, shall be numbered, shall mature and bear interest and shall have such other terms and provisions (including the application of any Credit Facility) permitted under the Act and not contrary to the terms of this Resolution as shall be provided in the First Supplemental Resolution and in the Second Supplemental Resolution.

(b) Additional Parity Indebtedness may also be issued under this Resolution pursuant to and subject to the terms and conditions of Article III hereof. The Additional Parity Indebtedness shall be issued in such aggregate principal amounts, for such purposes, shall be in such form and denomination, shall bear such dates, shall be numbered, shall mature and bear interest and shall have such other terms and provisions (including the application of any Credit Facility) permitted under the Act and not contrary to the terms of this Resolution (including particularly but without limitation this Article II and Article III of the Resolution) as shall be provided in the Supplemental Resolution executed in connection with the issuance thereof.

(c) Bonds may also be issued under this Resolution pursuant to Section 2.10 hereof in lieu of Bonds theretofore issued which have been mutilated, lost, destroyed or stolen.

SECTION 2.2. Place, Manner and Source of Payment of Bonds. The principal of and interest on the Bonds issued and to be issued hereunder, and the redemption premium, if any, payable thereon in case of redemption, shall be payable as may be designated in the particular Bond issued or to be issued hereunder, in lawful money of the United States of America.

Interest on Bonds of each series of Bonds shall be payable at the rates and in the manner specified herein and in the Supplemental Resolution authorizing such series of Bonds and shall accrue from the dated date of such Bonds and be payable in arrears. The interest on Bonds shall be paid by check or draft of the Trustee mailed on the relevant Interest Payment Date to the Registered Owner of the Bond as of the close of business on the relevant Record Date. Interest on any Bonds may also be payable by wire transfer to any Registered Owner of such Bonds in the principal amount of \$1,000,000 or more as of the close of business on the Record Date next preceding any Interest Payment Date at a wire destination in the continental United States provided such owner submits to the Trustee a written request therefor at least five (5) days before the Record Date for such payment.

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(b) Upon the resignation of any institution acting as Depository hereunder, or if the Authority determines that continuation of any institution in the role of Depository is not in the best interests of the Beneficial Owners or the Authority, the Authority will attempt to identify another institution qualified to act as Depository hereunder. If the Authority is unable to identify such successor Depository prior to the effective date of the resignation, the Authority shall, by resolution, discontinue the Book-Entry System, as provided in (a)(iii) above with respect to the applicable series of Bonds.

(c) So long as the Book-Entry System is used for Bonds of a series of Bonds, the Authority and the Trustee shall treat the Depository (or its nominee) as the sole and exclusive owner of such Bonds registered in its name for the purposes of payment of the principal or redemption price of or interest on the Bonds, selecting the Bonds or portions thereof to be redeemed, giving any notice permitted or required to be given to Bondholders under this Resolution, registering the transfer of such Bonds, obtaining any consent or other action to be taken by Bondholders and for all other purposes whatsoever, except as may otherwise be provided by law; and neither the Authority nor the Trustee shall be affected by any notice from any Person other than the Depository (or its nominee) to the contrary. None of the Authority, any Credit Facility Provider or the Trustee shall have any responsibility or obligation to any participant in the Depository, any person claiming a beneficial ownership interest in Bonds subject to the Book-Entry System of ownership and transfer under or through the Depository or any such participant, or any other person which is not shown on the registration books of the Trustee as being a Bondholder, with respect to: (A) such Bonds; or (B) the accuracy of any records maintained by the Depository or any such participant; or (C) the payment by the Depository or any such participant of any amount in respect of the principal or redemption price of or interest on such Bonds; or (D) any notice which is permitted or required to be given to Bondholders under this Resolution; or (E) the selection by the Depository or any such participant or any person to receive payment in the event of a partial redemption of such Bonds; or (F) any consent given or other action taken by the Depository as Bondholder. The Trustee shall cooperate with the Depository in connection with any consent given or other action taken by the Depository as Bondholder if and to the extent the Depository has delegated by proxy such consent or action to other Persons.

(d) Notwithstanding the payment provisions contained in the forms of Bonds subject to the Book-Entry System of ownership and transfer, so long as such Bonds or any portion thereof are registered in the name of the Depository or any nominee thereof, all payments of the principal or redemption price of or interest on such Bonds shall be made to the Depository or its nominee in New York Clearing House or equivalent next day funds on the dates provided for such payments under this Resolution, except as provided in a Supplemental Resolution. Each such payment to the Depository or its nominee shall be valid and effective to fully discharge all liability of the Authority or the Trustee with respect to the principal or redemption price of or interest on such Bonds to the extent of the sum or sums so paid. In the event of the redemption of less than all of the Bonds subject to the Book-Entry System of ownership and transfer Outstanding, the Trustee shall not require surrender by the Depository or its nominee of the Bonds so redeemed, but the Depository (or its nominee) may retain such Bond certificate as to the amount of such partial redemption; provided that, in each case the Trustee shall request, and the Depository shall deliver to the Trustee, a written confirmation of such partial redemption and

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thereafter the records maintained by the Trustee shall be conclusive as to the amount of the Bonds of such series and maturity which have been redeemed.

(c) So long as the Bonds subject to the Book-Entry System of ownership and transfer or any portion thereof are registered in the name of the Depository or any nominee thereof, all notices required or permitted to be given to the Bondholders under this Resolution shall be given to the Depository.

**SECTION 2.7. Provisions for Bond Register System.** The Bonds or any series of Bonds may be subject to a Bond Register System of ownership and transfer if so designated by the Authority in the Supplemental Resolution authorizing such series of Bonds or as provided in Section 2.6. A Supplemental Resolution may provide that Bonds of the Series of Bonds authorized thereby will be subject to a Book-Entry System of ownership only at particular times or from time to time. If the Book-Entry System shall be discontinued for any series of Bonds, the conversion to a Bond Register System for each such series of Bonds shall be effected pursuant to arrangements for the surrender of a single Bond for the applicable series of Bonds by the Depository and the issuance of Bonds of such series to Registered Owners that are reasonably satisfactory to the Trustee, which arrangements shall be communicated by the Trustee to the Depository on behalf of the Beneficial Owners. The conversion shall become effective hereunder and binding upon the Authority, the Trustee and all Registered Owners and Beneficial Owners at such time as may be specified in a Supplemental Resolution authorizing such series of Bonds or as specified in a resolution of the Authority. The general provisions of such Bond Register System, after conversion from the Book-Entry System, are as follows.

Any Bond may be transferred at the principal corporate trust office of the Trustee by the Registered Owner in person or by his attorney duly authorized in writing, and thereupon, the Authority shall execute in the name of the transferee or transferees, and the Trustee shall authenticate and deliver, a new Bond or Bonds, of the same series, of the same maturity, and for the same aggregate principal amount registered in such name or names as shall be requested. The Trustee shall register any transfer and shall deliver an appropriately registered and authenticated Bond or Bonds within seventy-two (72) hours of the receipt of the Bond or Bonds to be transferred and such other necessary documentation.

All Bonds shall be exchangeable for like Bonds of the same series of Bonds but different Authorized Denominations, in the same aggregate principal amount, maturing on the same dates and bearing the same rate of interest as the Bonds to be exchanged, all in the manner hereinafter provided. The Registered Owner of any Bond or Bonds, desiring to exchange such Bond or Bonds, shall present such Bond or Bonds, accompanied by appropriate instruments of transfer, at the principal corporate trust office of the Trustee, together with a written request for exchange, in form approved by the Authority, setting forth the denomination or denominations thereof and the person or persons in whose name such Bond or Bonds are to be registered. Thereupon, the Trustee shall authenticate and deliver to the Registered Owner thereunto entitled a new Bond or new Bonds of the same series of Bonds in authorized denominations aggregating the principal amount of the Bond or Bonds surrendered, maturing as to principal on the same date or dates, bearing the same rate of interest and bearing the same designation as to series.

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Bonds in temporary form shall be entitled to the lien and benefit of this Resolution. Unless otherwise agreed with the Registered Owner of such temporary Bond, the Authority shall, without unreasonable delay, prepare, execute and deliver to the Trustee, and thereupon, upon the presentation and surrender of any Bond or Bonds in temporary form, the Trustee shall authenticate and deliver, in exchange therefor, a Bond or Bonds in definitive form of the same series and the same maturity for the same aggregate principal amount as the Bond or Bonds in temporary form surrendered. Such exchange shall be made by the Authority at its own expense and without making any charge therefor. Until such Bonds in definitive form are ready for delivery, the Registered Owner of one or more Bonds in temporary form may, with the consent of the Authority, exchange the same, upon surrender thereof to the Trustee for cancellation, for Bonds in temporary form of like aggregate principal amount, of the same series and maturity and in authorized denominations.

**SECTION 2.10. Mutilated, Destroyed, Lost or Stolen Bonds.** Upon receipt by the Authority and the Trustee of evidence satisfactory to both of them that any Outstanding Bond has been mutilated, destroyed, lost or stolen, and of indemnity satisfactory to both of them, then the Authority, in its discretion, may execute and thereupon the Trustee shall authenticate and deliver, a new Bond of the same series and same maturity and of like tenor in exchange and substitution for, and upon surrender and cancellation of, the mutilated Bond or in lieu of and in substitution for the Bond so destroyed, lost or stolen.

The Authority may, for each new Bond authenticated and delivered under the provisions of this Section, require the payment of the expenses, including counsel fees, which may be incurred by the Authority and the Trustee in connection therewith. In case any such mutilated, destroyed, lost or stolen Bond has become or is about to become due and payable, the Authority, in its discretion, may, instead of issuing a new Bond, direct the payment thereof and the Trustee shall thereupon pay the same.

Any Bond issued under the provisions of this Section in lieu of any Bond alleged to be destroyed, lost or stolen, shall constitute an original additional contractual obligation on the part of the Authority whether or not the Bond so alleged to be destroyed, lost or stolen be at any time enforceable by anyone, and shall be equally and proportionately entitled to the benefits of this Resolution with all other Bonds issued under this Resolution.

### ARTICLE III ISSUANCE OF ADDITIONAL INDEBTEDNESS.

**SECTION 3.1. Purposes of Additional Parity Indebtedness.** The Authority may issue from time to time, and the Trustee shall authenticate, Additional Parity Indebtedness for any lawful corporate purpose, including but not limited to providing all or part of the funds necessary (i) to refinance or refund all or any portion of any Indebtedness of the Authority, including accrued and unpaid interest and redemption premium, if any; (ii) to plan, develop, construct, acquire, complete, restore or replace any Project or any portion thereof, including studies, planning and design and other preliminary costs and expenses in connection therewith; (iii) to provide working capital for the Board; including in each case the costs and expenses of the financing, any increase in the Debt Service Reserve Requirement incidental thereto and the funding of any reserves.

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Except as may be set forth in a Supplemental Resolution with respect to a series of Bonds, Bonds issued in exchange for or upon the registration of transfer of Bonds on or after the first Interest Payment Date thereon shall be dated as of the Interest Payment Date next preceding the date of delivery thereof by the Trustee, except that (a) if such date of delivery shall be an Interest Payment Date thereof, said Bonds shall be dated as of such date of delivery, or (b) if there shall be no Interest Payment Date thereof preceding such date of delivery, then notwithstanding any of the foregoing provisions of this section, such Bonds shall be dated the date of Bonds of such series upon their original issuance, or (c) if such date of delivery is on or after a Record Date and before the next succeeding Interest Payment Date, such Bonds shall be dated the date of such next succeeding Interest Payment Date, or (d) if interest on such Bonds shall not have been paid in full in accordance with its terms, then, notwithstanding any of the foregoing provisions of this Section, such Bonds shall be dated as of the date to which interest has been paid in full on such Bonds.

Registration, transfer and exchanges of Bonds authorized under this Article shall be without expense to the Registered Owners of such Bonds, except that any taxes or other governmental charges shall be paid by the Registered Owner requesting any such transaction, as a condition precedent to the exercise of such privilege.

The Trustee shall not be required to issue or transfer any Bonds during a period beginning at the opening of business on the fifth day (whether or not a business day) next preceding any date of selection of Bonds to be redeemed and ending at the close of business on the day on which the applicable notice of redemption is given or to transfer any Bonds which have been selected or called for redemption in whole or in part.

All Bonds executed, authenticated and delivered in exchange for Bonds surrendered or upon the transfer of registered Bonds shall be valid obligations of the Authority, evidencing the same debt as the Bonds surrendered, and shall be secured by the lien of this Resolution to the same extent as such surrendered Bonds.

**SECTION 2.8. Ownership of Bonds.** The Authority, the Trustee and any Paying Agent designated in any Bond may treat the Registered Owner of the Bond as the absolute owner of such Bond for all purposes whether or not such Bond shall be overdue, and neither the Authority, the Trustee nor any Paying Agent shall be affected by any notice to the contrary. Any consent, waiver or other action taken by the Registered Owner of any Bond shall be conclusive and binding upon such Registered Owner, his heirs, successors or assigns, and upon all transferees of such Bond whether or not notation of such consent, waiver or other action, shall have been made on such Bond or on any Bond issued in exchange therefor or upon registration or transfer thereof.

**SECTION 2.9. Temporary Bonds.** Until Bonds of a series of Bonds in definitive form are ready for delivery, the Authority may execute, and upon its request in writing the Trustee shall authenticate and deliver in lieu of any thereof, and subject to the same provisions, limitations and conditions, one or more printed, lithographed or typewritten Bonds of such series of Bonds in temporary form, substantially of the tenor of the Bonds hereinbefore described and with appropriate omissions, variations and insertions. Such Bond or Bonds in temporary form may be for the amount of any authorized denomination or any multiple thereof, as the Authority may determine. Until exchanged for Bonds of the same series of Bonds in definitive form such

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**SECTION 3.2. Conditions Precedent to the Issuance of Additional Parity Indebtedness.** The Trustee shall not authenticate or deliver to the Authority on its order any Additional Parity Indebtedness pursuant hereto unless theretofore or simultaneously therewith there shall have been delivered or paid to the Trustee the following:

(a) a certified copy of a resolution or resolutions of the Governing Board of the Authority authorizing the issuance of such Additional Parity Indebtedness, stating the purpose or purposes for the issuance of such Additional Parity Indebtedness, describing in brief and general terms the Projects to be financed by the issuance of such Additional Parity Indebtedness, if any, authorizing the execution and delivery of the Supplemental Resolution, and fixing the terms of such Additional Parity Indebtedness.

(b) a Supplemental Resolution executed by the Authority providing for the issuance of the Additional Parity Indebtedness, and containing such other necessary or proper terms, requirements and provisions which shall not be inconsistent with this Resolution or any previous Supplemental Resolution, unless all Bonds, the Registered Owners of which are entitled to the protection of the provision or provisions with which the Supplemental Resolution is inconsistent, have been paid or redeemed or provision therefor duly made. The provisions of Article II of this Resolution shall apply to any Additional Parity Indebtedness unless the relevant Supplemental Resolution explicitly provides otherwise.

(c) a written opinion or opinions of Bond Counsel to the effect that: (i) all conditions precedent to the issuance of the Additional Parity Indebtedness pursuant to the Act, this Resolution and any relevant Supplemental Resolution have been satisfied; (ii) the Additional Parity Indebtedness, when issued, will be valid and binding obligations of the Authority in accordance with their terms; (iii) it is proper for the Trustee to authenticate the Additional Parity Indebtedness; and (iv) if the Additional Parity Indebtedness is intended to be Tax-Exempt, an opinion to the effect that interest on the Additional Parity Indebtedness is Tax-Exempt.

(d) the written order of the Authority, signed by the Chairperson or Vice Chairperson of the Authority, ordering the Trustee to authenticate and deliver such Additional Parity Indebtedness, stating the amount of the proceeds of sale thereof and directing the application of such proceeds.

(e) the proceeds of the Additional Parity Indebtedness in the amounts stated in the order of the Authority described above, to be applied as described in such order.

(f) any additional deposit to the Debt Service Reserve Fund required with respect to the Additional Parity Indebtedness.

(g) a certificate duly executed by the Accountant (or an Authorized Representative of the Board or an Authorized Representative of the Authority, to the extent permitted by Section 3.3 hereof) stating that, based upon an audit of the books and records of the Board and the Authority, for any twelve (12) consecutive month period of the eighteen (18) calendar months immediately preceding the month during which the Additional Parity Indebtedness is to be issued (i) the Board has complied with the Rate Covenant, (ii) all deposits required to be paid

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into the Debt Service and Sinking Fund were made, and (iii) the Debt Service Reserve Fund Requirement was maintained in accordance with the Resolution.

(h) a certificate duly executed by an Engineer (or an Authorized Representative of the Board or an Authorized Representative of the Authority, to the extent permitted by Section 3.3 hereof) setting forth in detail and based upon reasonable assumptions set forth therein (1) his or her estimate of the Operating Expenses for each of the five (5) Fiscal Years following the Issuance of such Series of Bonds, plus the Fiscal Year in which such Bonds are issued; and (2) the Debt Service Requirements for each such Fiscal Year.

(i) a Certificate of the Rate Consultant setting forth his or her opinion that the amount of estimated Operating Revenues for each such Fiscal Year as described above will be sufficient, together with amounts capitalized, and to be capitalized, from proceeds of the Additional Parity Indebtedness or otherwise made available and reserved, or to be made available and reserved in connection with the issuance of the Additional Parity Indebtedness, and not already taken into account hereunder by reduction of the obligation which Operating Revenues must cover, to satisfy the Rate Covenant for each such Fiscal Year.

(j) a certificate duly executed by an Authorized Representative of the Authority setting forth in detail and based upon reasonable assumptions set forth therein his or her estimate of the Authority Expenses for each of the five (5) Fiscal Years following the issuance of such Series of Bonds, plus the Fiscal Year in which such Bonds are issued.

(k) if the Additional Parity Indebtedness is being issued to finance Projects, a certificate duly executed by an Engineer (or an Authorized Representative of the Board, to the extent permitted by Section 3.3 hereof) (1) stating that such Projects will be useful or desirable in connection with the operation of the Regional System, will be technically feasible and are in compliance with the Board's approved water system plan, as the same may be amended from time to time, (2) setting forth in detail and based upon reasonable assumptions set forth therein the estimated Costs of the acquisition or construction of such Projects including any financing expenses and, if judged necessary, a balance for contingencies, the sources of funds expected to be applied to finance such Costs, and the time period which will be required for completion of the acquisition or construction of such Projects, (3) his or her opinion that the net proceeds of the Additional Parity Indebtedness, together with other moneys which are then available or are reasonably expected to be available therefor, will be sufficient to pay the Costs of the acquisition or construction of such Projects, and (4) his or her opinion as to the date when such Projects will be placed in commercial operation.

(l) if the Additional Parity Indebtedness is being issued to finance the refunding of the 1996A Bonds, 1996B Bonds or Additional Parity Indebtedness, the Authority may provide, in lieu of the certificate described in paragraphs (h) and (i) of this Section, a certificate duly executed by an Accountant (or an Authorized Representative of the Authority, to the extent permitted by Section 3.3 hereof) stating that for the then current and each future Fiscal Year, the Debt Service Requirements for the refunding Bonds will be no more than ten per centum (10%) more than the Debt Service Requirements that would have existed for that Fiscal Year with respect to the portion of the 1996A Bonds, 1996B Bonds or the Additional Parity Indebtedness being refunded.

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completing, restoring or replacing Projects, after paying the costs and expenses of the financing and making any other payments and setting aside any reserves authorized by the Governing Board of the Authority, shall be deposited with the Trustee in a separate account within the Construction Fund. Any capitalized interest funded from the proceeds of such Additional Parity Indebtedness shall be deposited with the Trustee in the Special Operating Fund.

The Trustee shall be authorized to disburse the money in the Construction Fund from time to time for the purpose of paying or reimbursing the Board for the Costs of construction, acquisition, completion, restoration or replacement of Projects upon submission of requisitions of the Board of the character contemplated by Section 4.2, upon which the Trustee may conclusively rely, or as otherwise provided in the pertinent Supplemental Resolution. In the case of payments for the purchase price of lands, rights of way or easements, or for any Project which is to be situate on lands, rights of way or easements for which the Authority or the Board has not previously received the opinion of Counsel hereinafter described, the Authority or the Board shall also furnish to the Trustee an opinion of Counsel, upon which the Trustee may conclusively rely, that the Authority or the Board has acquired title or such appropriate interest thereto, which opinion may be based and rely upon title insurance, provided that if all Bonds then Outstanding shall have the benefit of one or more Credit Facilities, such opinion shall not be required if the Credit Facility Provider or Providers shall state that the opinion is not required in a writing delivered to the Trustee before any such payment.

The proceeds of Additional Parity Indebtedness issued for refunding purposes shall, after paying all costs and expenses incidental to the redemption and to the financing, be directly or indirectly applied by the Trustee to the payment or redemption of the Indebtedness to be refunded pursuant to the written order of the Authority described in Section 3.2(d) hereof.

The proceeds of Additional Parity Indebtedness issued for a purpose other than acquiring, constructing, completing, restoring or replacing Projects or to accomplish a refunding program of the Authority shall, after paying all costs and expenses incidental to the financing, be deposited in the Construction Fund and disbursed to the Authority as provided in the Article IV hereof, unless otherwise prescribed by the Supplemental Resolution authorizing the Additional Parity Indebtedness.

**SECTION 3.5. Additional Parity Indebtedness on Parity.** All Additional Parity Indebtedness issued from time to time under this Article III shall be on a parity with the 1996A Bonds and 1996B Bonds and with all other Additional Parity Indebtedness issued hereunder, except as expressly provided herein or permitted by this Resolution.

**SECTION 3.6. Subordinated Indebtedness.** The Authority may issue from time to time one or more series of Subordinated Indebtedness pursuant to the terms of a Supplemental Resolution for any lawful purpose of the Authority (including the provision of working capital of the Board), such Subordinated Indebtedness to be in substantially such form as may be approved by the Authority and specified in the Supplemental Resolution authorizing the same. The priority of payments of principal or redemption price and interest on such Subordinated Indebtedness and the security therefor shall be as provided in the applicable Supplemental Resolution, which shall make such provisions for payment of the Debt Service Requirements of

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(m) if the Additional Parity Indebtedness is being issued to finance a refunding (1) executed counterparts of such documents as are necessary or appropriate for the purposes of the refunding, including, specifically, an escrow deposit agreement providing for the deposit and application of funds for the refunding, (2) unless all refunded Indebtedness is to be redeemed or otherwise retired on the date of settlement for the refunding Bonds, such schedules, verified as to their mathematical accuracy by an Accountant, as are necessary to demonstrate the adequacy of funds deposited for the refunding and the income thereon for the purpose of paying, when due, the principal or redemption price of and interest on the refunded Indebtedness, and (3) evidence satisfactory to the Trustee that notice of any necessary redemption has been properly given, or that provisions satisfactory to the Trustee have been made therefor, or that sufficient waivers of such notice have been duly filed with the Trustee.

The opinion(s) of Bond Counsel described in paragraph (c) above may be accepted by the Trustee as conclusive evidence that the requirements of this Section have been complied with, and the Trustee shall thereupon be authorized to execute said Supplemental Resolution, to authenticate the Additional Parity Indebtedness and to deliver the same to or upon the order of the Chairperson or Vice Chairperson of the Authority.

**SECTION 3.3. Exceptions for Certain Additional Parity Indebtedness.** (a) Notwithstanding anything to the contrary in paragraphs (g), (h), (i), and (k) of Section 3.2 above, the requirements of those paragraphs may be met by providing certificates as described in those paragraphs executed by an Authorized Representative of the Authority or the Board, as the case may be, so long as the aggregate principal amount of Additional Parity Indebtedness being issued pursuant to this Section does not exceed either \$1,000,000 or for completion bonds for a Project, provided, with respect to Bonds to be issued to complete the Cost of the construction of a Project, that the Engineer certifies that such funds are sufficient to complete the Cost of the construction of such Project.

(b) Furthermore, notwithstanding anything to the contrary in paragraphs (g), (h), (i), (j), (k) and (l) of Section 3.2 above, the Authority may issue Additional Parity Indebtedness without satisfying paragraphs (g), (h), (i), (j) and (k) of Section 3.2 above in any authorized amount if (i) all Outstanding 1996A Bonds, 1996B Bonds and Additional Parity Indebtedness are secured as to the payment of the principal of and interest due on such 1996A Bonds, 1996B Bonds and Additional Parity Indebtedness by a Credit Facility or Credit Facilities and issued concurrently with the delivery of each series of Bonds and being security for each series of Bonds, or any replacement thereof permitted in accordance with any Supplemental Resolution pursuant to which the applicable Bonds were issued and no such Credit Facility Provider has wrongfully dishonored a draw request for payment under such Credit Facility, which wrongful dishonor remains unsecured, and (ii) the Credit Facility Provider or Credit Facility Providers, as the case may be, of each series of such 1996A Bonds, 1996B Bonds and Additional Parity Indebtedness consents to the issuance of the Additional Parity Indebtedness without satisfaction of such paragraphs or (iii) if the proceeds of such Additional Parity Indebtedness will be expended on a Project required to be constructed to comply with any State or federal law, rule or regulation.

**SECTION 3.4. Application of Proceeds of Additional Parity Indebtedness.** The proceeds of the Additional Parity Indebtedness issued for the purpose of acquiring, constructing,

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the Subordinated Indebtedness from Revenues held in the Revenue Fund in a manner consistent with Article Five of this Resolution.

**SECTION 3.7. Credit Notes.** The Authority may issue from time to time one or more Credit Notes pursuant to the provisions of a Supplemental Resolution. Any Credit Note that secures a Credit Facility with respect to the 1996A Bonds, the 1996B Bonds or any Additional Parity Indebtedness shall be subordinate only to the Bonds of the Series of Bonds to which the Credit Facility relates. Therefore, a Credit Facility Provider shall be entitled to share in the Trust Estate under and according to Section 10.10 hereof only when all amounts due and payable on the Bonds of the Series of Bonds to which the Credit Facility it has issued relates have been fully paid. Any Credit Note that secures a Credit Facility with respect to Subordinated Indebtedness shall be likewise subordinated to such Subordinated Indebtedness. Furthermore, notwithstanding anything to the contrary contained herein, the Authority shall not be obligated to establish or fund a Debt Service Reserve Requirement with respect to any Credit Note, nor include any contingent payments under any Credit Note as part of any calculation of Debt Service Requirements.

**SECTION 3.8. Authorized Principal Amount of Bonds.** Unless the Act is amended or otherwise provides, the aggregate principal amount of Bonds issued by the Authority pursuant to this Resolution shall not exceed one hundred million dollars (\$100,000,000), excluding Bonds issued to refund or otherwise repay other Bonds; provided, however, that upon any such refunding or repayment the total aggregate principal amount of outstanding Bonds may be greater than one hundred million dollars (\$100,000,000) only if the Authority provides a certificate duly executed by the Accountant (or an Authorized Representative of the Authority) certifying that the present value of the aggregate debt service of the refunding or repayment Bonds to be issued shall not exceed the present value of the aggregate debt service of the Bonds so to be refunded or repaid. For purposes of this Section 3.8, "present value" shall be determined in accordance with Section 1226-1 of the Act.

#### ARTICLE IV CONSTRUCTION FUND AND COSTS OF ISSUANCE FUND.

**SECTION 4.1. Establishment of Construction Fund.** The Trustee shall establish and maintain a Construction Fund, which shall consist of separate accounts or subaccounts for each Project or portion thereof the construction or acquisition of which is to be financed, or refinanced, with the 1996A Bonds, the 1996B Bonds or a particular series of Additional Parity Indebtedness and which shall be held separate and apart from all other funds and accounts established under this Resolution and from all other money of the Trustee. No disbursements of funds held from time to time in the Construction Fund shall be made except as permitted in this Article IV. Any amounts on deposit in any account or subaccount for any Project subsequent to the date on which the Water Board shall have certified to the Authority and to the Trustee that construction or acquisition, as the case may be, of such Project is complete shall be transferred to the Bond Redemption and Accumulated Surplus Fund. The Trustee shall invest the money on deposit in the Construction Fund pursuant to Section 6.2 hereof and shall apply the income from such investments as provided therein.

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SECTION 4.2. Payments from Construction Fund.

A. Projects to Be Constructed. The Trustee shall make payments from the Construction Fund with respect to Projects to be constructed only (i) upon the prior receipt of a requisition, signed on behalf of the Board by an Authorized Representative, and if with respect to construction costs, approved by the Engineer, stating (a) the date, (b) the name of the Person to whom the payment is to be made (which may be the Board if it is to be reimbursed for advances made or obligations incurred by it and properly chargeable against the Construction Fund), (c) the amount to be paid, (d) in reasonable detail and if appropriate by reference to Cost categories in the Project Budget, the purpose for which the payment is to be made, (e) that the obligation was properly incurred and is a Cost of the Project, (f) that the amount requisitioned is due and unpaid, and has not been the subject of any previously paid requisition, (g) that following the payment the amount remaining on deposit in the Construction Fund either (i) is estimated to be sufficient to pay the remaining cost of completing the Project or repair for which the payment was made or (ii) the Board has certified to the Authority and to the Trustee that it is taking appropriate steps either to reduce the Cost or raise additional moneys (whether through increasing Revenues or through the issuance of debt) so that the amount remaining or deposited in the Construction Fund is estimated to be sufficient to pay the remaining Costs of completing the Facility or repair, and (h) that with respect to items covered in the requisition, the signer has no knowledge of any vendors', mechanics' or other liens, conditional sales contracts, chattel mortgages, leases of personalty, title retention agreements or security interests which should be satisfied or discharged before the payments as requisitioned therein are made or which will not be discharged by such payment or (ii) as otherwise provided in a Supplemental Resolution. If the costs of the Project or repair in question are in aggregate less than \$5,000,000, the approving Engineer need not be Independent of the Board.

B. Projects to Be Acquired. In the event that proceeds of the 1996A Bonds, the 1996B Bonds or Additional Parity Indebtedness are intended to be used in whole or in part to acquire a Project, whether or not the Project is completely or partly constructed, such proceeds shall be disbursed from the Construction Fund to or upon the order of the Authority for the payment of the purchase price of the Project upon the terms and conditions specified in the Supplemental Resolution authorizing the 1996A Bonds, the 1996B Bonds or the Additional Parity Indebtedness, as the case may be. In cases where the Project is intended to be acquired and construction may remain to be done following acquisition by the Authority, the Authority may direct the Trustee as to the amount of money held in the account established therefor in the Construction Fund that is to be allocated the purchase price of the Project and the remaining construction cost of the Project at the time of its acquisition.

C. The Trustee agrees that it shall hold all requisitions, affidavits, certificates and other documents delivered to the Trustee pursuant to paragraph A above for a period of at least seven (7) years after the date of receipt thereof. The Authority, the Board, the Engineer, Bondholders, and their agents and representatives shall have the right to inspect such requisitions, affidavits, certificates and other documents at the Trustee's Principal Office at reasonable times and upon reasonable notice.

Whenever disbursements are to be made to reimburse the Board for advances or to discharge indebtedness of the Authority, the requisition shall relate to the underlying obligation for which the

held by the Trustee in trust for the payment to the respective Registered Owners of the particular Bonds so selected for redemption.

SECTION 5.2. Revenue Fund. There is hereby established a special fund, designated as the "Revenue Fund," to be held by the Trustee separate and apart from the other funds and accounts of the Trustee.

The Authority shall cause all Revenues received from the Board, except federal, State or municipal aid provided to the Board to pay a Cost, Costs or Costs of a Project, which aid shall be deposited in the Construction Fund, to be transferred to the Trustee for deposit into the Revenue Fund in the amounts and in the order of priority as provided in Section 4.2(c) of the Agreement, promptly upon receipt, but in no event less frequently than monthly. Amounts held in the Revenue Fund shall be invested solely as directed in writing by an Authorized Representative of the Authority in Investment Securities, subject to the limitations imposed thereon by the Act.

If an Event of Default has occurred under the Agreement and is then continuing, and if the Trustee has exercised its remedy contained in Section 10.3(1)(ii) hereof the Trustee shall deposit such amount in the Operating Expense Account of the Operating Fund, for the payment of Operating Expenses, as the Trustee shall determine necessary and appropriate, such amount as the Board would have had to deposit therein had it not been in default.

SECTION 5.3. Operating Fund. The Authority covenants to create and maintain one or more accounts in one or more banks or trust companies including but not limited to the banking department of the Trustee, designated as the "Operating Fund" separate and apart from the other funds and accounts of the Authority. The Operating Fund shall initially consist of two accounts, the Operating Expense Account and the Authority Expense Account.

If an Event of Default has occurred and is then continuing under the Agreement, and if the Trustee has exercised its remedy contained in Section 10.3(1)(ii) hereof, the Trustee shall transfer from the Revenue Fund or, as permitted by Section 5.11 hereof, the Bond Redemption and Accumulated Surplus Fund to the Operating Expense Account amounts sufficient to pay, or reimburse the Board for having paid from sources other than Revenues, Operating Expenses.

The Trustee shall transfer from the Revenue Fund or, as permitted by Section 5.11 hereof, the Bond Redemption and Accumulated Surplus Fund or the Repair and Improvement Fund to the Authority Expense Account such amounts as may be necessary to pay, or reimburse the Authority for having paid from sources other than Revenues, Authority Expenses.

Transfers from the Revenue Fund or the Bond Redemption and Accumulated Surplus Fund shall be made by the Trustee from time to time upon the written request of an Authorized Representative of the Board or Authority, as the case may be, as necessary to pay Operating Expenses and Authority Expenses due or to become due during the month of transfer or to reimburse the Board or the Authority for having paid Operating Expenses or Authority Expenses otherwise than with Revenues.

The Operating Fund and the money from time to time on deposit therein shall be applied solely for the payment of Authority Expenses and, if an Event of Default has occurred and is then continuing under the Agreement and if the Trustee has exercised its remedy contained in Section

Board is being reimbursed or for the payment of which the indebtedness of the Authority was incurred.

SECTION 4.3. The Costs of Issuance Fund. The Trustee shall create, at a minimum, one separate fund, entitled the "Costs of Issuance Fund," to be held separate from all other funds and accounts of the Trustee.

The Authority shall transfer to the Trustee for deposit in the Costs of Issuance Fund any proceeds of Bonds or other amounts designated by the Authority. The Trustee shall apply the amounts on deposit in the Costs of Issuance Fund to the payment of Costs of Issuance of Bonds of the related series of Bonds. Any amounts on deposit therein that are not so applied within one year of deposit shall be applied to any Fund in which there is a deficiency, and, to the extent not so required, transferred to the Bond Redemption and Accumulated Surplus Fund. Costs of Issuance, including without limitation the Cost of any Credit Facility, shall be paid by the Trustee from the Costs of Issuance Fund without need of prior invoice from the Credit Facility Provider.

Amounts held in the Costs of Issuance Fund shall be invested by the Trustee solely in Investment Securities, subject to the limitations imposed thereon by the Act.

ARTICLE V

REVENUES AND FUNDS.

SECTION 5.1. Pledge of Revenues; Security Interest. As security for its obligation to make payments required hereunder and to secure the performance and observance of all the covenants and conditions contained herein, and in confirmation of and subject to the Granting Clauses hereof, the Authority pledges and grants to the Trustee, subject to the uses and applications authorized or required by either this Resolution or the Agreement, a Lien on and security interest in the Trust Estate. The pledge made by this Resolution shall be valid and binding from the time such pledge is made, and the covenants and agreements set forth herein to be performed by or on behalf of the Authority shall be for the benefit, protection and security of the Registered Owners of the Bonds, the Promissory Note and Subordinated Indebtedness with priority and distinction as expressly provided herein or permitted by this Resolution. The Trust Estate shall immediately be subject to the Lien of the pledge without any physical delivery thereof or further act, and, except as otherwise provided herein, shall be held by the Trustee until disbursed as authorized by this Resolution in trust for the benefit of the Registered Owners from time to time of the Bonds, the Promissory Note and Subordinated Indebtedness issued and Outstanding under this Resolution and the Agreement.

Notwithstanding the above pledge, money from time to time deposited and held in the Debt Service and Sinking Fund for the payment of particular Bonds shall be held in trust by the Trustee for payment to the respective Registered Owners from time to time of the particular Bonds for the payment of which said money has been deposited in said Fund, and whenever Bonds shall be selected for redemption out of money on deposit in the Bond Redemption and Accumulated Surplus Fund, the money in such Fund to the amount necessary to pay principal, redemption premium, if any, and interest to the date fixed for redemption on the Bonds selected for redemption, shall be

10.3(1)(ii) hereof, Operating Expenses. The disbursement of amounts in the Operating Fund shall be governed by such financial control standards and practices as are deemed prudent by the Authority.

Any money in the Operating Fund at the end of any Fiscal Year not required to pay accrued but unpaid Operating Expenses or Authority Expenses for such Fiscal Year, and not intended to be applied to pay Operating Expenses or Authority Expenses during the next ensuing Fiscal Year quarter, shall be applied to any Fund in which there is a deficiency and, to the extent not so required, shall be transferred and deposited by the Trustee in the Bond Redemption and Accumulated Surplus Fund.

SECTION 5.4. Special Operating Fund. There is hereby created a special fund known as the Special Operating Fund which shall be held in trust by the Trustee until applied as hereinafter provided. Within the Special Operating Fund there shall be established the Capitalized Interest Account. Within the Capitalized Interest Account there shall be established a separate sub-account for each series of Bonds for which there is to be a deposit of capitalized interest. The Authority shall pay to the Trustee for deposit in the Special Operating Fund such amounts as the Authority shall determine from the proceeds of Bonds for allocation to the various accounts according to the terms of the applicable Supplemental Resolution or Resolution of the Authority, as the case may be. Amounts held in the Special Operating Fund shall be invested solely by the Trustee as directed in writing by an Authorized Representative of the Authority in Investment Securities.

The Trustee shall transfer automatically on each Interest Payment Date from the Capitalized Interest Account of the Special Operating Fund to the Debt Service and Sinking Fund an amount equal to the interest component of the Debt Service Requirements for Bonds that has accrued through the last day of the immediately preceding Interest Payment Date on each series of Bonds for which there has been a deposit of capitalized interest in the Capitalized Interest Account of the Special Operating Fund. Such amounts, to the extent available, shall be taken from the sub-account of the Capitalized Interest Account established with respect to the series of Bonds for which the transfer is made and shall be credited to the sub-account for such series of Bonds in the Debt Service and Sinking Fund. The Authority may also withdraw upon written requisition filed with the Trustee identifying the purpose thereof from the sub-account of the Capitalized Interest Account relating to a series of Bonds amounts needed to pay the costs and fees of any Credit Facility or remarketing service in effect with respect to Bonds of such series of Bonds.

SECTION 5.5. Debt Service and Sinking Fund. There is hereby created a special fund known as the Debt Service and Sinking Fund which shall be held in trust by the Trustee until applied as hereinafter provided. The Debt Service and Sinking Fund shall include a separate account for each series of Bonds issued hereunder.

The Authority shall pay to the Trustee from available Revenues (after the deposit required by Section 5.3 hereof) for deposit in the relevant account of the Debt Service and Sinking Fund on or before the first Business Day of each calendar month an amount equal, in the aggregate, to Accrued Debt Service for all Bonds issued hereunder. In the event moneys are not sufficient for the payment of Debt Service on a payment Date, the Trustee shall, without instruction or further direction from the Authority, promptly transfer the requisite amounts from the Debt Service Reserve

Fund to the relevant accounts of the Debt Service and Sinking Fund to make good any such deficiency.

The money held from time to time in the Debt Service and Sinking Fund shall be applied by the Trustee without further direction from the Authority to the payment of the Debt Service Requirements on the Bonds as and when the same shall become due and payable; provided that if the same shall have been paid under a Credit Facility (other than municipal bond insurance) relating to the series of Bonds on which the payments were due, including in those instances where Debt Service Requirements on a series of Bonds has been paid in the first instance from the proceeds of a Credit Facility, amounts equal to such payments on deposit in the account of the Debt Service and Sinking Fund established with respect to Bonds of such series of Bonds shall be paid to the Credit Facility Provider as reimbursement. If a Supplemental Resolution provides that Debt Service Requirements on Bonds of a series of Bonds issued thereunder are to be paid in the first instance from the proceeds of a Credit Facility, the Trustee shall comply with the terms of such Supplemental Resolution in that regard and draw upon the Credit Facility to pay Debt Service Requirements on Bonds of such series of Bonds.

**SECTION 5.6. Promissory Note Fund.** There is hereby established a special fund, designated the "Promissory Note Fund," which shall be held by the Trustee separate and apart from the other funds and accounts of the Authority until applied as hereinafter provided.

The Trustee shall deposit in the Promissory Note Fund from available Revenues (after the deposit required by Sections 5.3 and 5.5 hereof) on or before the first Business Day of each calendar month an amount equal, in the aggregate, to Accrued Promissory Note Payments. In the event moneys are not sufficient for the payment of any principal or interest on the Promissory Note, after taking into consideration any permitted set-off pursuant to the terms of the Reimbursement Obligation, the Trustee shall, without instruction or further direction from the Authority, promptly transfer the requisite amounts from first the Repair and Improvement Fund and second from the Bond Redemption and Accumulated Surplus Fund to make good any such deficiency.

The money held from time to time in the Promissory Note Fund shall be applied by the Trustee to the payment of the Promissory Note as and when the same shall become due and payable.

**SECTION 5.7. Pilot Payments Fund.** There is hereby established a fund, designated the "Pilot Payments Fund," which shall be held in trust by the Trustee and which shall consist of separate accounts or subaccounts for each Municipality or school district to be paid at the times and in the amounts determined pursuant to Section 1226-r of the Act from Revenues and which such Pilot Payments Fund shall be held separate and apart from all other funds and accounts established under this Resolution and from all other moneys of the Trustee. The Trustee shall deposit in the Pilot Payments Fund from available Revenues (after the deposits required by Sections 5.3, 5.5, and 5.6 hereof) on or before the first Business Day of each month an amount as the Authority notifies the Trustee is necessary so that the balance in the Pilot Payments Fund equals the Pilot Payments to be made during such Fiscal Year in a timely manner.

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payment of such series of Bonds during such twelve (12) month period pursuant to this Section, and any amounts which are currently payable to the Rebate Fund.

Except to the extent that a Supplemental Resolution shall provide otherwise, when all Outstanding Bonds of a particular series shall have been paid, purchased or redeemed, or provision for their payment or redemption duly made, the amount then held in the Debt Service Reserve Fund pursuant to this Section 5.8 in respect of such series of Bonds (except for amounts payable to the Rebate Fund) shall, upon the written instructions of the Chairperson or Vice-Chairperson of the Authority, be transferred from the Debt Service Reserve Fund and deposited in the Bond Redemption and Accumulated Surplus Fund or applied by the Trustee pursuant to such instructions to the prompt purchase or redemption of Bonds.

**SECTION 5.9. Reserve Fund Credit Facility.** The Authority may elect to satisfy in whole or in part the Debt Service Reserve Requirement by means of a letter of credit, insurance policy or surety bond (together with any substitute or replacement therefor, the "Reserve Fund Credit Facility"), subject to the following requirements:

(A) The Reserve Fund Credit Facility Provider must have a credit rating issued by a Rating Agency not less than the then current rating on the related series of Bonds and in any event equal to one of the Rating Agency's three highest long-term rating categories;

(B) The Authority shall not secure any obligation to the Reserve Fund Credit Facility Provider by a Lien on the Trust Estate superior to the Lien on the Trust Estate granted to the Bondholders;

(C) Each Reserve Fund Credit Facility shall have a term of at least one (1) year (or, if less, the remaining term of the related series of Bonds) and shall entitle the Trustee to draw upon or demand payment at such times and for such purposes as the Trustee would be entitled to claim the funds and investments that would be on deposit in the Debt Service Reserve Fund were there no such Reserve Fund Credit Facility and receive the amount so requested in immediately available funds not later than five (5) Business Days after such draw or demand. To assure a timely draw on any Reserve Fund Credit Facility and timely payment of funds in the Debt Service and Sinking Fund as provided in Section 5.5 hereof, any Supplemental Resolution providing for a Reserve Fund Credit Facility shall provide that the date for deposit in the applicable account of the Debt Service and Sinking Fund for a series of Bonds for which a Reserve Fund Credit Facility has been provided shall be no later than five days prior to the first Business Day of each calendar month in which an Accrued Debt Service payment is due;

(D) The Reserve Fund Credit Facility shall permit a drawing by the Trustee for the full Stated Amount in the event (i) the Reserve Fund Credit Facility expires or terminates for any reason prior to the final maturity of the related series of Bonds, and (ii) the Authority fails to satisfy the Debt Service Reserve Requirement by the delivery to the Trustee of cash, obligations, a substitute Reserve Fund Credit

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The Trustee shall make payments from the Pilot Payments Fund only (i) upon the prior receipt of a requisition, signed on behalf of the Board by an Authorized Representative, stating (a) the date, (b) the name of the Municipality or school district to which the payment is to be made, (c) the amount to be paid.

**SECTION 5.8. Debt Service Reserve Fund.** There is hereby created a special fund known as the Debt Service Reserve Fund which shall be held in trust by the Trustee until applied as hereinafter provided. The Debt Service Reserve Fund shall include a separate account for each series of Bonds issued hereunder.

The Trustee shall be authorized, without further direction from the Authority, to apply the money in the Debt Service Reserve Fund toward the payment of the Debt Service Requirements from time to time becoming due and payable upon a series of Bonds, to the extent that the Debt Service and Sinking Fund shall at any time be insufficient with respect to such series of Bonds. The Trustee shall, for any particular series of Bonds, initially draw funds from the related account within the Debt Service Reserve Fund, and to the extent a deficiency in the Debt Service and Sinking Fund continues to exist subsequent to the exhaustion of such related account, the Trustee shall draw funds from all other accounts within the Debt Service Reserve Fund pro-rata on the basis of the amount held in each of the other accounts at the time of such draw.

In the event of any deficiency in the Debt Service Reserve Fund, the Authority shall thereafter make monthly transfers from the Revenue Fund, (after the deposits required by Sections 5.3, 5.5, 5.6 and 5.7 hereof), until the amount in each account in the Debt Service Reserve Fund in cash or investments shall equal the Debt Service Reserve Requirement for such account. Amounts held in each account of the Debt Service Reserve Fund shall be restored to their respective Debt Service Reserve Requirement within twelve (12) months after the occurrence of any deficiency therein. The investments of each account of the Debt Service Reserve Fund made pursuant to Section 6.2 shall, for the purpose of determining the amount from time to time in the Debt Service Reserve Fund, be valued annually by the Trustee at amortized cost. The investments of the accounts of the Debt Service Reserve Fund shall include (i) investments that at the time of acquisition would constitute Investment Securities if the stated level of required ratings, if any, for Investment Securities were at least the second highest whole rating category (without regard to pluses or minuses) for the type of rating in question (e.g. short-term or long-term) and (ii) securities which can be liquidated by or on behalf of the Trustee not later than ten (10) years from the date of their acquisition for an amount at least equal to the principal thereof and all accrued interest (or amortized discount) thereon to the liquidation date, whether by maturity, redemption, tender or otherwise.

Upon written instructions of an Authorized Officer of the Authority during the twelve (12) month period prior to the final maturity date of any series of Bonds, money held in the related account shall be credited against the amount otherwise transferable from the Revenue Fund to the Debt Service and Sinking Fund in respect of Debt Service Requirements for such Bonds and shall be transferred to the Debt Service and Sinking Fund for the payment of such Debt Service Requirements; provided, however, that no such credit shall be given and no such transfer shall be made if, immediately prior to such crediting and transfer, the amount on deposit in the related Account is not at least equal to (i) the Debt Service Reserve Requirement with respect to such series of Bonds less (ii) the amounts previously transferred to the Debt Service and Sinking Fund for

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Facility, or any combination thereof, for deposit in the related account in the Debt Service Reserve Fund on or before the date of such expiration or termination;

(E) If the rating issued by the Rating Agencies to the Reserve Fund Credit Facility Provider is withdrawn or reduced below the rating assigned to that of the related series of Bonds immediately prior to such action by the Rating Agencies, the Authority shall provide a substitute Reserve Fund Credit Facility within sixty (60) days after said rating change, and, if no substitute Reserve Fund Credit Facility is delivered to the Trustee by such date, shall fund the Debt Service Reserve Requirement in not more than forty-eight (48) equal monthly payments commencing not later than the first day of the month immediately succeeding the date representing the end of said sixty (60) day period; and

(F) If the Reserve Fund Credit Facility Provider commences any insolvency proceedings or is determined to be insolvent or fails to make payments when due on its obligations, the Authority shall provide a substitute Reserve Fund Credit Facility within sixty (60) days thereafter, and, if no substitute Reserve Fund Credit Facility is delivered to the Trustee by such date, shall fund the Debt Service Reserve Requirement in not more than forty-eight (48) equal monthly payments commencing not later than the first day of the month immediately succeeding the date representing the end of said sixty (60) day period.

If the events described in either (E) or (F) above occur, the Trustee shall not relinquish the Reserve Fund Credit Facility at issue until after the Debt Service Reserve Requirement is fully satisfied by the provision of cash, obligations, or a substitute Reserve Fund Credit Facility or any combination thereof. In the event a Reserve Fund Credit Facility is delivered to the Trustee, the Trustee shall transfer the money and securities held in the related account of the Debt Service Reserve Fund, to the extent not needed to comply with the Debt Service Reserve Requirement, to the Bond Redemption and Accumulated Surplus Fund. The Trustee is hereby authorized and directed to draw upon or demand payment from any such Reserve Fund Credit Facility in accordance with its terms in the event funds are needed from the Debt Service Reserve Fund in accordance with Section 5.8 hereof. Any amount received from the Reserve Fund Credit Facility shall be deposited directly into the Debt Service and Sinking Fund and such deposit shall constitute the application of amounts in the Debt Service Reserve Fund. If amounts held in an account of the Debt Service Reserve Fund containing a Reserve Fund Credit Facility are less than the related Debt Service Reserve Requirement because the Reserve Fund Credit Facility has been drawn upon and has not been reinstated, the Authority shall transfer from the Revenue Fund, (after the deposits in Section 5.3, 5.5, 5.6, 5.7 and 5.8 hereof, in amounts sufficient to reinstate said Reserve Fund Credit Facility, and the Trustee shall pay such amounts to the Reserve Fund Credit Facility Provider. Upon the reinstatement of the Reserve Fund Credit Facility, said payment shall constitute the replenishment of said account.

**SECTION 5.10. Repair and Improvement Fund.** There is hereby created a special fund to be known as the Repair and Improvement Fund which shall be held in trust by the Trustee until applied as hereinafter provided. There shall be deposited in the Repair and Improvement Fund at the time of the sale of the 1996A Bonds and the 1996B Bonds from moneys available for such purpose an amount equal to the Repair Reserve Requirement. To the extent that

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amounts on deposit in the Repair and Improvement Fund are less than the Repair Reserve Requirement, the Board shall pay to the Authority for deposit in the Repair and Improvement Fund as soon as the Board determines it to be practicable sufficient Revenues in an amount equal to the shortfall.

Whenever there shall be a deficiency in the Promissory Note Fund, the Trustee shall forthwith and without instructions from the Authority, make good such deficiency from the Repair and Improvement Fund. If there shall be no such deficiency in said Fund, the money in the Repair and Improvement Fund shall be paid out from time to time by the Trustee upon requisitions or letters of instruction indicating in reasonable detail the purpose of the payment and signed on behalf of the Board by its Chairperson or Vice-Chairperson. To the extent proceeds held in the Repair and Improvement Fund are to be applied towards the purposes described in paragraphs (a) or (c) below, the requisitions filed with the Trustee shall be of the character contemplated by Section 4.2 hereof.

The money on deposit in the Repair and Improvement Fund may be used for any one or more of the following purposes:

- (a) to pay all or any part of the cost of constructing, acquiring, completing or restoring Projects;
- (b) to pay the cost of renewals to or replacements of Projects or to pay the cost of extraordinary maintenance and repairs thereto;
- (c) to repay the temporary loans, or any part thereof, incurred for the purpose of acquiring or constructing Projects, renewals and replacements or undertaking extraordinary maintenance and repairs; or
- (d) to pay other debts and liabilities of the Board incurred in connection with the operation of the Regional System not otherwise provided for, any Pilot Payments and to the payment of Debt Service Requirements.

In case of payments for the acquisition of land, rights-of-way and easements, the Authority shall also furnish the Trustee with an opinion of Counsel satisfactory to the Trustee, upon which the Trustee may conclusively rely, stating that the Authority has acquired or upon satisfactory completion of the transaction will acquire title to such lands, rights-of-way or easements.

**SECTION 5.11. Bond Redemption and Accumulated Surplus Fund.** There is hereby created a special fund to be known as the Bond Redemption and Accumulated Surplus Fund which shall be held in trust by the Trustee until applied as hereinafter provided. At the end of each Fiscal Year the Authority shall deposit in the Bond Redemption and Accumulated Surplus Fund all Revenues then on hand and not otherwise on deposit in a fund or account, the net proceeds from the sale of any Project in accordance with the Agreement as well as insurance and condemnation proceeds received as a result of damage, destruction or condemnation of any Project in accordance with Section 8.1(b) hereof. Any such sale, insurance or condemnation proceeds shall be applied solely for the purpose of purchasing or redeeming bonds as described below.

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liability with respect to making, holding, redeeming or selling such investments in accordance with the foregoing.

(g) Any and all money held as part of the Rebate Fund shall be considered proceeds of the Bonds for all purposes including, but not limited to, the limitations on investments in Non-purpose Obligations.

(h) The Rebate Amount shall be paid to the United States by the Trustee on behalf of and at the written direction of the Authority in installments as provided in the Rules. Each payment of an installment of the amount required to be paid to the United States shall be paid at the time and in the manner provided in the Rules. The duty of the Trustee to make payments to the United States pursuant to this Section 5.12(h) and the Rules shall be expressly limited to funds available in the Rebate Fund at the times such payments are required to be made (including all investment earnings on funds theretofore deposited by the Trustee in the Rebate Fund), and any other funds actually provided to the Trustee by the Authority for such payments. The Trustee shall not be under any duty to pay any amounts in excess of the amount available in the Rebate Fund, if any, or actually provided to it by the Authority. The Trustee shall not have any duty to determine the Rebate Amount or expend its own funds with respect to the determination that any amounts are rebatable or the calculation thereof.

**SECTION 5.13. Transfer to Bond Redemption and Accumulated Surplus Fund.** The Trustee shall on the last business day of each Fiscal Year, so long as any Bond is outstanding, transfer to the Bond Redemption and Accumulated Surplus Fund (a) any funds remaining in the Debt Service and Sinking Fund not required to pay or provide for the payment of Debt Service Requirements for the Bonds, and (b) any funds remaining in each account of the Debt Service Reserve Fund not required to maintain the Debt Service Reserve Requirement for said account. The Trustee shall also deposit in the Bond Redemption and Accumulated Surplus Fund any amounts otherwise directed or required to be transferred thereto pursuant to the terms of the Resolution and the Agreement. The Trustee shall account for deposits into and transfers out of any account or fund on a first-in, first-out accounting basis.

**SECTION 5.14. Discontinuation of Funds.** In the event that the Authority shall desire to redeem and pay all Outstanding Bonds, and the money in the funds held by the Trustee under this Resolution, or in any one or more of said funds, together with other available money, are sufficient to effect such redemption or payment, including in addition to principal and interest, costs of redemption and proper charges and expenses of the Trustee, said funds or any one or more of them as the case may be, may be discontinued and the money therein applied toward such redemption or payment.

**SECTION 5.15. Additional Funds or Accounts.** (a) The Authority or the Trustee at the direction of the Authority may create such additional funds or accounts (or additional accounts or subaccounts within existing funds or accounts) as the Authority deems necessary or desirable, including, without limitation, such funds or accounts relating to Subordinated Indebtedness. Any Supplemental Resolution may provide for additional amounts to be paid into any of the funds or accounts established hereunder and the manner of making payments into and disbursements from such funds or accounts not materially inconsistent with the provisions of this Resolution.

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Whenever there shall be a deficiency in any other fund or account hereunder or a fund or account held by the Board under the Agreement, the Trustee shall forthwith and without instructions from the Authority, make good such deficiency from moneys, except sale, insurance or condemnation proceeds on deposit in the Bond Redemption and Accumulated Surplus Fund. If there shall be no such deficiency in any of said funds, the money in the Bond Redemption and Accumulated Surplus Fund shall be paid out from time to time by the Trustee upon requisitions or letters of instruction indicating in reasonable detail the purpose of the payment and signed on behalf of the Authority by its Chairperson or Vice-Chairperson.

The money on deposit in the Bond Redemption and Accumulated Surplus Fund may be used to purchase or redeem any Bonds of any series at a price not greater than 100% of the principal amount thereof (or, to the extent permitted by law, the then current optional redemption price for such series of Bonds) plus accrued interest.

**SECTION 5.12. Rebate Fund.** (a) There is hereby created and established with the Trustee a special fund to be known as the Rebate Fund which shall be used for the deposit of the Rebate Amount, and shall not be subject to the lien of this Resolution.

(b) The Authority covenants to determine the Rebate Amount or cause the same to be determined in the manner provided in Section 148(f) of the Code, the Treasury Regulations promulgated thereunder and any other rules which may be promulgated thereafter by the Treasury Department or Internal Revenue Service (the "Rules") and to transfer or cause to be transferred to Trustee such determination for purposes of paragraph (c) of this Section 5.12.

(c) Records of each of the determinations required to be made pursuant to Section 5.12(b) hereof and the Rules shall be retained by the Trustee until a date which is six (6) years after the retirement of the last Bond.

(d) The Trustee shall deposit in the Rebate Fund the Rebate Amount which may be from deposits by the Authority or from available investment earnings on amounts held in the Construction Fund, the Debt Service Reserve Fund, the Special Operating Fund or the Bond Redemption and Accumulated Surplus Fund, as directed in writing by the Authority. If the Authority fails to make any payment to the Trustee, the Trustee may, but shall not be required to, transfer money without requisition first from the Construction Fund and then from the Bond Redemption and Accumulated Surplus Fund to the Rebate Fund so that such payment can be made.

(e) If any amount shall remain in the Rebate Fund after the Trustee has made the final payment to the United States in accordance with the Rules, such amount shall be deposited in the Bond Redemption and Accumulated Surplus Fund.

(f) Any money held as a part of the Rebate Fund shall be invested or reinvested by the Trustee, as directed in writing by the Authority, in Investment Securities, subject to the restrictions set forth in the Rules. The Trustee may make any and all such investments through its own investment department. In making investments, the Trustee may rely upon the directions of the Authority as to the investments purchased and shall be and hereby is relieved of all

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(b) The Authority may create, outside of the Trust Estate, additional funds or accounts funded solely with moneys not subject to the Lien of the Resolution.

## ARTICLE VI

### SECURITY FOR AND INVESTMENT AND DEPOSIT OF FUNDS.

**SECTION 6.1. Deposits and Security Therefor.** All money received by the Trustee under this Resolution for deposit in any fund established hereunder shall, except as hereinafter provided, be deposited in interest bearing accounts in the commercial or trust department of the Trustee, until or unless invested or deposited as provided in Section 6.2 hereof. All deposits in the commercial department of the Trustee (whether original deposits under this Section 6.1 or deposits or redeposits in time accounts under Section 6.2 hereof) in excess of the amount covered by insurance by the Federal Deposit Insurance Corporation, shall be secured by a pledge of Government Obligations having an aggregate market value, exclusive of accrued interest, at all times at least equal to the balance so deposited, or secured as required by applicable law. If at any time the commercial or trust department of the Trustee is unwilling to accept such deposits or unable to secure them as provided above, the Trustee may deposit such money with any other depository which is authorized to receive them and is subject to supervision by public authorities. All deposits in any other depository (whether under this Section or Section 6.2 as aforesaid) in excess of the amount covered by insurance by the Federal Deposit Insurance Corporation shall to the extent permitted by law, be secured by a pledge of Government Obligations having an aggregate market value, exclusive of accrued interest, at all times at least equal to the balance so deposited. Such security shall be deposited with a Federal Reserve Bank or with a bank or trust company having a combined capital and surplus of not less than \$20,000,000.

Notwithstanding the foregoing, or anything else to the contrary herein, the proceeds of any payments under a Credit Facility and the proceeds of any remarketing of Bonds pursuant to a Supplemental Resolution shall be held by the Trustee or a Tender Agent, as the case may be, separate and apart from any other funds of the Authority, the Trustee or the Tender Agent and from any other funds held under this Resolution for the exclusive benefit of the parties to be paid therefrom and may be invested only in Government Obligations maturing coming due by the earlier of thirty (30) days following investment on the date needed for the purposes of this Resolution.

### SECTION 6.2. Investment of Funds.

A. The Trustee shall, pursuant to written or oral (promptly confirmed in writing) investment instructions from an Authorized Representative of the Authority, invest and reinvest money held in any fund or account held by the Trustee under this Resolution in Investment Securities. Such instructions may authorize specific transactions with respect to the deposits to be made or the Investment Securities to be purchased and the prices to be paid, and may include general instructions for future reinvestments of cash as and when such obligations are paid or redeemed. The scope of such general instructions shall be satisfactory to the Trustee which may, if it deems it advisable, from time to time require specific instructions or general instructions within defined limits. All investments made pursuant to this Section 6.2 shall mature or be subject to redemption at not less than the principal amount thereof or the cost of

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acquisition, whichever is lower, and all deposits in time accounts shall be subject to withdrawal, not later than the date when the amounts will foreseeably be needed for purposes of this Resolution.

B. The interest and income received upon such investments and any interest paid by the Trustee or any other depository of any fund or account and any profit or loss resulting from the sale of any investment shall be added or charged to the fund or account in question, provided, however, that the Trustee shall credit any investment income or loss with respect to any fund or account established hereunder to any other fund or account, as directed in writing by the Authority. Subject to the requirements of Section 5.12 hereof, investment earnings on amounts held in the Debt Service Reserve Fund shall be transferred to the Debt Service and Sinking Fund unless the Authority otherwise directs in writing.

C. Upon request of the Authority, whenever a payment is to be made out of any fund or account the Trustee shall sell such Investment Securities as may be requested or required to make the payment and restore the proceeds to the fund or account in which the Investment Securities were held. The Trustee shall not be accountable for any depreciation in the value of any such Investment Security or for any loss resulting from the sale thereof.

**SECTION 6.3. Valuation of Funds.** To the extent the Trustee holds amounts in any fund or account established under this Resolution, and at the direction of the Authority, the Trustee shall compute the value of the assets of each such fund or account after taking into account any payments required to be made to Bondholders on such dates and any transfers required to be made hereunder. In computing the value of any fund or account, investments and accrued interest thereon shall be deemed a part thereof. Such investments shall be valued at the face value or the current market value thereof, whichever is the lower, or at the redemption price thereof, if then redeemable at the option of the owner, provided, however, that the value of investments with respect to the Debt Service Reserve Fund shall be calculated in accordance with Section 5.8 hereof.

#### ARTICLE VII

##### REDEMPTION OF BONDS.

**SECTION 7.1. Bonds Subject to Redemption.** The Bonds issued or to be issued hereunder shall be subject to redemption at such time or times and from time to time, in such order, at such redemption prices, upon such notice, and upon such terms and conditions as may be expressed in the particular Bond, or, as the case may be, in this Resolution or in the pertinent Supplemental Resolution. In the event of a conflict between this Resolution and a Supplemental Resolution concerning these matters, including, without limitation, notice of any redemption, the Supplemental Resolution shall govern.

**SECTION 7.2. Notice of Redemption.** Whenever the Authority shall, by Resolution of the Authority, determine to redeem Outstanding Bonds in accordance with the right reserved to do so, the Authority shall give the Trustee not more than sixty (60) days' and at least forty-five (45) days' notice of the date fixed for redemption. When Bonds are called for redemption, whether at the option of the Authority or pursuant to mandatory redemption, the Trustee shall

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the redemption date so designated and, if an amount sufficient to pay the Redemption Price is on deposit with the Trustee for such purpose on such date, interest on such Bonds shall cease to accrue from the redemption date whether or not the Bonds shall be presented for payment. The principal amount of all Bonds or portions thereof so called for redemption, together with the accrued and unpaid interest thereon to the date of redemption shall be paid by the Trustee or the Paying Agent, if any, mentioned in the Bond called for redemption, upon presentation and surrender thereof in negotiable form. If any Outstanding Bond is redeemed in part, the Trustee shall authenticate and deliver to the Registered Owner thereof, a new Bond or Bonds of any authorized denomination as requested by such Registered Owner in an aggregate principal amount equal to the principal amount of the Outstanding Bond not called for redemption.

**SECTION 7.4. Destruction of Bonds.** All Bonds which shall be paid, purchased or redeemed by the Trustee or Authority pursuant to the terms and provisions of this Resolution, or of any Supplemental Resolution, shall be canceled and destroyed by the Trustee which shall furnish the Authority with its certificates of destruction.

#### ARTICLE VIII

##### INSURANCE.

**SECTION 8.1. Damage or Destruction of the Regional System: Application of Insurance Proceeds.** The Board has covenanted in Section 9.1 of the Agreement to insure or cause to be insured the Regional System as therein set forth and to file with the Trustee policies and endorsements or memoranda of such insurance. The Trustee agrees to notify the Board if it becomes aware that said policies, endorsements or other evidences of insurance do not comply with Section 9.1 of the Agreement. In the event that any of the buildings, structures, additions or improvements of the Regional System shall be wholly or partially destroyed by fire or other casualty covered by permanent insurance, the Board has covenanted in the Agreement to take all such actions and do all such things as may be necessary to enable recovery to be made upon the policy or policies of insurance covering the risk to the end that all proceeds of insurance may be expeditiously collected.

The proceeds of permanent insurance shall be applied, subject to the provisions of this Section 8.1, to the reconstruction, restoration, replacement or repair of the damaged or destroyed property, or to the acquisition or construction of Projects or to the redemption or purchase of Bonds as follows:

(a) **Deposit in Construction Fund.** If the Board shall by resolution determine to apply all or part of said proceeds to the reconstruction, restoration or repair of the damaged property or to the construction or acquisition of Projects, an Authorized Representative of the Board shall provide a written authorization to the Trustee directing the Trustee to deposit such proceeds in the Construction Fund. Disbursements may be made from the Construction Fund by the Trustee from time to time upon requisitions made by an Authorized Representative of the Board, stating the amount to be paid and designating the payee and certifying that the payment is due and payable for the reconstruction, restoration, replacement or repair of the damaged or destroyed property or for the construction or acquisition of a Project, and, if the Engineer is employed to supervise the work, upon submission of certificates of the Engineer in form satisfactory to the

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cause a notice to be deposited in the United States mail first class, postage prepaid, not more than sixty (60) days and at least thirty (30) days prior to the redemption date addressed to the Registered Owners of the Bonds called for redemption, at the addresses appearing in the records kept by the Trustee. Such Notice shall be given in the name of the Authority, shall identify the Bonds to be redeemed by certificate number, CUSIP number, date of issue, interest rate, maturity date and any other identifying information (and in the case of a partial redemption of any Bonds, the respective principal amounts thereof to be redeemed and the numbers, including CUSIP numbers if applicable, of the Bonds to be redeemed which may, if appropriate, be expressed in designated blocks of numbers) shall specify the redemption date, the redemption price, and the Trustee's name and address and shall state that on the redemption date the Bonds called for redemption will be payable at the principal corporate trust office of the Trustee and that from the date of redemption interest will cease to accrue provided, however, that the Registered Owners of all Bonds to be redeemed may file written waivers of notice with the Trustee, and if so waived, such Bonds may be redeemed and all rights and liabilities of the Owners shall mature and accrue on the date set for such redemption, without the requirement of written notice. Any defect in or failure to give such notice with respect to any particular Bond or Bonds shall not affect the validity of any such redemption of other Bonds.

In addition, the Trustee shall cause copies of such notice of redemption to be sent by registered mail, certified mail, overnight delivery service or confirmed telecopy (or other similarly secure service acceptable to the Trustee) to the Depository and to two or more national information services that disseminate redemption information. Unless otherwise waived by the Depository, the notice to the Depository shall be sent at least two (2) business days in advance of the date notices addressed to registered owners and national information services are deposited in the United States mail. The current name and address of the Depository is as follows: The Depository Trust Company, 55 Water Street, New York, New York, 10041-0099. Certain national information services include: Kenny Information Systems, Inc., Called Bond Service, 55 Broad Street, 28th Floor, New York, New York 10004; Moody's Investors Service, Inc., Municipal and Government, 99 Church Street, 8th Floor, New York, New York 10007; Standard & Poor's Corporation, Called Bond Records, 25 Broadway, New York, New York 10004; and The Bond Buyer, One State Street Plaza, New York, New York 10004. The Trustee shall not be required to advertise said notice of redemption.

The Trustee shall send a second copy of said redemption notice by registered or certified mail, postage prepaid, to all registered bond owners that do not present their Bonds for payment within thirty (30) days following the Redemption Date.

If at the time of the notice of redemption the Authority shall not have deposited with the Trustee money sufficient to redeem all the Bonds called for redemption and the Trustee shall not otherwise hold such money for such purpose, such notice may state that it is conditional, that is, subject to the deposit of the redemption money with the Trustee not later than the opening of business on the redemption date, and such notice shall be of no effect unless such moneys are so deposited.

**SECTION 7.3. Payment of Redemption Price.** Notice having been given in the manner hereinbefore provided, or written waivers of notice having been filed with the Trustee prior to the date set for redemption, the Bonds so called for redemption shall become due and payable on

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Trustee approving such payment; provided, however, that if the Board shall certify to the Trustee that the amount to be so applied from said insurance proceeds is not more than \$1,000,000, then the Board may retain said insurance proceeds for application toward the reconstruction, restoration, replacement or repair of the damaged or destroyed property or toward the construction or acquisition of Projects.

(b) **Deposit in Bond Redemption and Accumulated Surplus Fund.** All proceeds of permanent insurance not applied as hereinabove authorized shall be transferred to the Trustee for deposit in the Bond Redemption and Accumulated Surplus Fund and applied by the Trustee to redeem or purchase Bonds in accordance with the final paragraph of Section 5.11 hereof.

Nothing in this Section 8.1 shall be construed to relieve the Board under the Agreement from its obligation to maintain the Regional System in good repair, working order and condition, excepting only that to the extent that the proceeds of insurance shall be applied to the reconstruction, restoration, replacement or repair of damaged or destroyed property, or to the construction or acquisition of Projects, or shall be applied toward the purchase, redemption, or defeasance of Bonds, then and to such extent the Board shall be relieved of such obligation with respect to the damaged or destroyed property.

#### ARTICLE IX

##### PARTICULAR COVENANTS OF THE AUTHORITY.

**SECTION 9.1. Payment of Bonds and Other Indebtedness.** The Authority covenants that it will promptly pay from the Trust Estate the Debt Service Requirements for every Bond issued and to be issued hereunder and secured thereby, and all other Indebtedness secured thereby, including without limitation Credit Notes at the place and on the dates and in the manner specified herein and in said Bonds, or therein, according to the true intent and meaning thereof. The Authority further covenants that it will pay as and when due from sources legally available therefor the Debt Service Requirements on all other Indebtedness.

**SECTION 9.2. No Impairment of Bondholders' Rights.** The Authority covenants and agrees that so long as any of the Bonds secured hereby are Outstanding, none of the Pledged Revenues shall be used for any purpose other than as provided in this Resolution, and that no contract or contracts shall be entered into or amended or any action taken by which the rights or security of the Trustee or of the Bondholders may be impaired or diminished.

**SECTION 9.3. Further Action.** The Authority covenants that it will, from time to time, execute and deliver such further instruments and take such further action as may be reasonable and as may be required to carry out the purpose of this Resolution.

**SECTION 9.4. Creation of Liens on Pledged Revenues.** Except as provided in Article III hereof and the next ensuing sentence, the Authority shall not incur any Indebtedness which is secured by a pledge of or other Lien on the Pledged Revenues or any other part of the Trust Estate other than the 1996A Bonds and the 1996B Bonds, and shall not create or cause to be created any Lien on the Pledged Revenues or any other part of the Trust Estate or on any amounts which are held by the Trustee or by any Paying Agent under the terms of this

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Resolution, other than Permitted Encumbrances or Liens which are expressly made subordinate to the lien of this Resolution. Notwithstanding the prior sentence, the Authority may from time to time borrow an amount outside this Resolution which shall not exceed \$500,000 in principal amount in the aggregate at any one time for working capital purposes and secure the repayment of the same by granting a Lien on Pledged Revenues that is on a parity with the Lien thereon securing the Bonds if the Authority presents to the Trustee a certificate of an Authorized Officer of the Authority to the effect that (i) the Board needs the proceeds of the borrowing to operate the Regional System properly and (ii) the Authority reasonably believes that it will meet its obligations on such borrowing and under this Resolution as and when the same come due.

**SECTION 9.5. No Extension of Time for Payment of Interest.** In order to prevent any accumulation of claims for interest after maturity, the Authority covenants and agrees that it will not directly or indirectly extend or assent to the extension of time of payment of any claim for interest on any of the Bonds and will not, directly or indirectly, be a party to or approve any such arrangement by purchasing or funding such claims for interest or in any other manner. In case any such claim for interest shall be extended or funded, such claim for interest shall not be entitled in case of any default hereunder, to the benefit or security of this Resolution except subject to the prior payment in full of the principal of all Bonds issued and Outstanding hereunder, and of all claims for interest which shall not have been so extended or funded.

**SECTION 9.6. Accounts and Periodical Reports and Certificates.** The Authority shall keep or cause to be kept proper books of record and account (separate from all other records and accounts) in which complete and correct entries shall be made of its transactions under this Resolution and which, together with all other books and papers of the Authority, shall at all reasonable times be subject to the inspection of the Trustee or the representative, duly authorized in writing, of the holder or holders of not less than 25% in principal amount of the Bonds then Outstanding.

**SECTION 9.7. Authority Budget.** The Authority covenants that it will adopt by resolution and file with the Trustee and the Board for each Fiscal Year, an Authority Budget or Budgets setting forth the estimated Authority Expenses, Debt Service Requirements, Pilot Payments, and other expenses, if any. Any Authority Budget may be amended or supplemented at any time, but such amended or supplemented Authority Budget shall not supersede any prior Authority Budget until it shall have been authorized by a certified resolution of the Authority. The Authority Budget may authorize certain variances for various line items at the discretion of Authority officers, as the Governing Board of the Authority deems prudent, and amounts expended within such authorized variances shall be deemed to be within the amount provided for in the Authority Budget.

**SECTION 9.8. Engineer.** The Authority shall, until the Bonds and the interest thereon shall have been paid or provision for such payment shall have been made, for the purpose of performing and carrying out the duties imposed on the Engineer by this Resolution or the Agreement, employ an Independent Engineer or engineering firm having a nationwide and favorable repute for skill and experience in such work and, except in the case of the firm serving as Engineer at the time of the adoption of this Resolution, who shall be acceptable to the Trustee; provided, however that the acceptance of the Trustee shall not be unreasonably withheld, and if the Trustee shall fail to so accept, it shall deliver to the Authority a statement of its reasons for

such failure. In rendering any report, certificate or opinion required pursuant to this Resolution or the Agreement, the Engineer may rely upon information, certificates, opinions or reports required to be provided by others pursuant to this Resolution, and upon other sources which the Engineer considers reliable, and other considerations and assumptions as deemed appropriate by the Engineer.

**SECTION 9.9. Rate Consultant.** The Authority shall, until the Bonds and the interest thereon shall have been paid or provision for such payment shall have been made, for the purpose of performing and carrying out the duties, imposed on the Rate Consultant by this Resolution or the Agreement, employ an Independent Accountant or firm of independent accountants, or a management consultant or management consulting firm, or independent engineer or engineering firm, having, in any case, a nationwide and favorable repute for skill and experience in such work and, except in the case of the firm serving as the Rate Consultant at the time of the adoption of this Resolution, who shall be acceptable to the Trustee; provided, however, that the acceptance of the Trustee shall not be unreasonably withheld, and if the Trustee shall fail to so accept it shall deliver to the Authority a statement of its reasons for such failure. In rendering any report, certificate or opinion required pursuant to this Resolution or the Agreement the Rate Consultant may rely upon information, certificates, opinions or reports required to be provided by others pursuant to this Resolution, and upon other sources which the Rate Consultant considers reliable, and other considerations and assumptions as deemed appropriate by the Rate Consultant.

**SECTION 9.10. Financing Statements.** The Authority shall cause financing statements relating to this Resolution to be filed, registered and recorded in such manner and at such places as may be required by law (in the opinion of Counsel) to fully protect the security of the Registered Owners of the Bonds. The Authority shall perform or shall cause to be performed any acts, and execute and cause to be executed any and all further instruments as may be required by law (in the opinion of Counsel) or as shall reasonably be requested by the Trustee for the protection of the interests of the Trustee and the Bondholders, and shall furnish satisfactory evidence to the Trustee of recording, registering, filing and re-filing of such instrument and of every additional instrument which shall be necessary to preserve the lien and security interest of this Resolution upon the Trust Estate or any part thereof until the principal and of interest on the Bonds secured hereby shall have been paid. The Authority and the Trustee shall execute or join in the execution of any such further or additional instrument and file or join in the filing thereof at such time or times and in such place or places as the Trustee may be advised by an opinion of Counsel will preserve the lien and security interest of this Resolution upon the Trust Estate or any part thereof until the aforesaid principal and interest shall have been paid.

**SECTION 9.11. Federal Tax Covenants.** The Authority hereby covenants not to take or omit to take any action so as to cause interest on any Tax-Exempt Bonds to be no longer excluded from gross income for the purposes of federal income taxation and to otherwise comply with the requirements of Section 103 and Sections 141 through 150 of the Code, and all applicable regulations promulgated with respect thereto, throughout the term of such Tax-Exempt Bonds. The Authority further covenants that it will make no investments or other use of the proceeds of any Tax-Exempt Bonds which would cause such Tax-Exempt Bonds to be "arbitrage bonds" as defined in Section 148 of the Code. The Authority further covenants to comply with the rebate requirements (including the prohibited payment provisions) contained in

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Section 148(f) of the Code and any regulations promulgated thereunder, including the payment of any Rebate Amount, to the extent applicable, and to pay any interest or penalty imposed by the United States for failure to comply with said rebate requirements, to the extent applicable.

**SECTION 9.12. Maintenance of the Agreement.** The Authority covenants and agrees to take all steps legally within its power to maintain in full force and effect, for its part, the Agreement, if any, to comply with its obligations under each of the foregoing and to enforce each of the foregoing against the other parties thereof.

**SECTION 9.13. Issuance of Obligations.** The Authority covenants not to issue any Indebtedness, or other obligations of any type with a maturity maturing on a date, or permit the same to remain outstanding beyond a date, that would cause the term of the Agreement to exceed the term allowed by law.

## ARTICLE X

### EVENTS OF DEFAULT AND REMEDIES.

**SECTION 10.1. Events of Default Defined.** Each of the following shall be an "Event of Default" hereunder:

A. Payment of the principal of any Bond is not made when it becomes due and payable at maturity or upon redemption, or otherwise or if payment of any installment of interest on any Bond is not made when it becomes due and payable; or

B. If the Authority defaults in the due and punctual performance of any other covenant in the Bonds or in this Resolution, and such default continues for thirty (30) days after written notice requiring the same to be remedied shall have been given to the Authority by the Trustee; provided that if any such default cannot be cured within thirty (30) days the period shall be extended for such period as is reasonable to cure the same with due diligence if the Authority commences the cure within thirty (30) days and proceeds diligently; or

C. A default under the Agreement by the Board shall have occurred and be continuing after any permitted period of cure therein provided for a period of forty-five days after written notice thereof stating that such notice is a "Notice of Default" to the Authority and the Board by the Trustee, or to the Authority, the Board and the Trustee by the holders of not less than twenty-five percent (25%) in principal amount of Bonds Outstanding; or

D. The occurrence of any Act of Bankruptcy with respect to the Authority; or

E. The failure of timely payment of the purchase price of any tendered Bond required to be paid according to the Supplemental Resolution authorizing such Bond; or

F. Such additional Events of Default as may be set forth in a Supplemental Resolution duly executed in connection with the issuance of the 1996A Bonds, the 1996B Bonds or any Additional Parity Indebtedness.

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The Trustee shall give written or telephonic (promptly confirmed in writing or by confirmed telecopy) notice of any Event of Default, as herein defined, to the Authority and any Credit Facility Provider as soon as practicable after the occurrence of such Event of Default becomes known to the Trustee.

Notwithstanding the foregoing provisions, Additional Parity Indebtedness in the form of capitalized leases may provide for grace periods of up to twelve (12) months before the occurrence of a default under the lease shall constitute an Event of Default as herein defined hereunder.

**SECTION 10.2. Bonds Declared Due and Payable.** Upon the happening and continuance of any Event of Default specified in Section 10.1 of this Article, then and in every such case the Trustee may, and upon the written request of the Registered Owners of not less than twenty-five percent (25%) in principal amount of the Bonds Outstanding shall (but in all events only after giving thirty (30) days' notice in writing to the Authority), declare the principal of all the Bonds Outstanding (if not then due and payable) to be due and payable immediately, and upon such declaration the same shall become and be immediately due and payable, anything contained in the Bonds or in this Resolution to the contrary notwithstanding; provided, however, that if at any time after the principal of the Bonds shall have been so declared to be due and payable, and before the entry of final judgment or decree in any suit, action or proceeding instituted on account of such default, or before the completion of the enforcement of any other remedy under this Resolution, money shall have accumulated in the Debt Service and Sinking Fund sufficient to pay the principal of all Bonds which have matured and which should have been called for redemption from money in the Debt Service and Sinking Fund and all matured Bonds, if any, and all arrears of interest, if any, upon all the Bonds Outstanding (except the principal of any Bonds not then due by their terms except as provided above and the interest accrued on such Bonds since the last interest payment date), and the charges, compensation, expenses, disbursements, advances and liabilities of the Trustee, and all other amounts then payable by the Authority hereunder shall have been paid or a sum sufficient to pay the same shall have been deposited with the Trustee, and every other default known to the Trustee in the observance or performance of any covenant, condition or agreement contained in the Bonds or in this Resolution (other than a default in the payment of the principal of such Bonds) then due only because of a declaration under this Section shall have been remedied to the satisfaction of the Trustee, then and in every such case the Trustee may, and upon the written request of the Registered Owners of not less than twenty-five percent (25%) in principal amount of the Bonds not then due by their terms and then Outstanding shall, by written notice to the Authority, rescind and annul such declaration and its consequences, but no such rescission or annulment shall extend to or affect any subsequent default or impair any right consequent thereon.

**SECTION 10.3. Enforcement of Remedies by Trustee.** Upon the happening and continuance of any Event of Default specified in Section 10.1 then and in every such case the Trustee may, and upon the written request of the Registered Owners of not less than twenty-five percent (25%) in principal amount of the Bonds then Outstanding hereunder, shall:

(1) By mandamus or other suit, action or proceeding at law or in equity enforce all rights of the Registered Owners, including the right (i) to require the Board to collect fees, rates, and charges adequate to carry out any agreement as to, or pledge of, such fee, rates, and charges, (ii) to demand all moneys and securities then held by the Board in the "Regional Water Fund" and in all "Accounts" created thereunder, as such terms are

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defined in the Agreement, and all Revenues thereafter be promptly paid to the Trustee for deposit in the Revenue Fund, and (iii) to require the Authority to carry out any other agreements with the Board or any Municipality or the Registered Owners of such Bonds and to perform its duties under this Resolution and the Act; and/or

- (2) Bring suit upon such Bonds; and/or
- (3) By action or suit in equity, require the Authority to account as if it were the trustee of an express trust for the Registered Owners of such Bonds; and/or
- (4) Make demand for payment, or draw under, any Credit Facility that may be available for the payment of the Debt Service Requirements of Bonds of any series of Bonds; and/or
- (5) By action or suit in equity, enjoy any acts or things which may be unlawful or in violation of the rights of the Registered Owners of such Bonds; and/or
- (6) Enforce the Agreement, as assignee of the Authority; and/or
- (7) Perform the Authority's obligations under the Agreement.

The Trustee hereunder shall proceed in accordance with the Act, subject to the provisions of Section 10.1, to protect and enforce its rights and the rights of the Registered Owners under the laws of the State or under this Resolution by such suits, actions or special proceedings in equity or at law, or by proceedings in the office of any board or officer having jurisdiction, either for the specific performance of any covenant or agreement contained herein or in aid or execution of any power herein granted or for the enforcement of any proper legal or equitable remedy as the Trustee, being advised by counsel, shall deem most effectual to protect and enforce such rights. In the enforcement of any remedy under this Resolution the Trustee shall be entitled to sue for, enforce payment of and receive any and all amounts then or during any default becoming and at any time remaining due from the Authority for principal, interest or otherwise under any of the provisions of this Resolution or of the Bonds and unpaid, with interest on overdue payments at the rate or rates of interest specified in such Bonds, together with any and all costs and expenses of collection and of all proceedings hereunder and under such Bonds, without prejudice to any other right or remedy of the Trustee or of the Registered Owners, and to recover and enforce any judgment or decree against the Authority, but solely as provided herein and in such Bonds, for any portion of such amounts remaining unpaid, with interest, costs and expenses, and to collect (but solely from money in the Debt Service and Sinking Fund, Debt Service Reserve Fund, Bond Redemption and Accumulated Surplus Fund and any other money available for such purpose) in any manner provided by law, the money adjudged or decreed to be payable.

Any suit, action or proceeding by the Trustee on behalf of Registered Owners shall be held and maintained in a court of competent jurisdiction. The Trustee shall, in addition to the foregoing, have and possess all of the powers necessary or appropriate for the exercise of any functions specifically set forth in the Act or incident to the general representation of Registered Owners in the enforcement and protection of their rights as mandated in Section 1226-m of the Act. All rights of action under this Resolution or under any of the Bonds secured hereby, enforceable by the Trustee, may be enforced by it without the possession of any of the Bonds or the production thereof at the

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**SECTION 10.7. Appointment of Receiver.** Upon the happening and continuance of any Event of Default specified in Section 10.1, the Trustee, whether or not the issue of Bonds represented by such Trustee has been declared due and payable, shall be entitled as of right to the appointment of a receiver of any part or parts of the properties the Revenues of which are pledged for the security of the Bonds of such issue (including but not limited to any amounts held in either the Revenue Fund or the Operating Fund), and such receiver may enter and take possession of such part or parts of the properties and, subject to any pledge or agreement with Bondholders, shall take possession of all money and other property derived from such part or parts of the properties and proceed with any construction thereon or the acquisition of any property, real or personal, in connection therewith which the Authority is under obligation to do, and to operate, maintain and reconstruct such part or parts of the properties and collect and receive all Revenues thereafter arising therefrom subject to any pledge thereof or agreement with Bondholders relating thereto and perform the public duties and carry out the agreements and obligations of the Authority under the direction of the court. In any suit, action or proceeding by the Trustee the fees, counsel fees and expenses of the Trustee and of the receiver, if any, shall constitute taxable disbursements and all costs and disbursements allowed by the court shall be a first charge on any Revenues from the properties.

**SECTION 10.8. Extension of Maturity of Bonds.** In case the maturity of any of the Bonds or the time for payment of any installments of interest shall be extended by mutual agreement between the Authority and the Registered Owner of any such Bonds, such Bonds or claims for interest shall not be entitled in case of any default hereunder to the benefit of this Resolution or to any payment out of any assets of the Authority or the funds (except funds held in trust by the Trustee for the payment of particular Bonds or claims for interest pursuant to this Resolution) held by the Trustee, 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.

**SECTION 10.9. Modifications with Respect to Credit Facilities Pursuant to Supplemental Resolutions.** If so specified in the Supplemental Resolution relating to a particular series of Bonds, any action that may be taken by and any consent that must be received from the Registered Owners of all or some lesser percentage of the Bonds Outstanding of such series of Bonds under Article X of this Resolution shall instead and in lieu thereof be taken by or received from the Credit Facility Provider of a Credit Facility under which Debt Service Requirements for Bonds of such series of Bonds are payable if and when there does not exist a Credit Facility Default with respect to such Credit Facility. If any such action or consent requires a vote by the Registered Owners of the Bonds of such series of Bonds because there are then Outstanding hereunder Bonds of more than one series of Bonds, the Supplemental Resolution may also specify that the Credit Facility Provider shall have the right to vote hereunder with respect to the action or consent fully as if it were the Registered Owner of all of the Bonds of the series of Bonds unless there shall then exist a Credit Facility Default with respect to the Credit Facility.

**SECTION 10.10. Priority of Payments After Default.** Notwithstanding any other provisions of this Resolution other than those contained in this Section 10.10, in the event that, subsequent to the occurrence of an Event of Default, the funds held by the Trustee shall be insufficient for the payment of interest and principal then due on the Bonds, such funds (other than funds held for the payment or redemption of particular Bonds or installments of interest

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trial or other proceeding relative thereto, and any such suit, action or proceeding instituted by the Trustee shall be brought in its name for the benefit of all the Registered Owners of such Bonds, subject to the provisions of this Resolution.

**SECTION 10.4. Effect of Discontinuance of Action.** In case any proceeding taken by the Trustee on account of any default shall have been discontinued or abandoned for any reason or shall have been determined adversely to the Trustee, then and in every such case the Authority, the Trustee and the Registered Owners shall be restored to their former positions and rights hereunder, respectively, and all rights, remedies, powers and duties of the Trustee shall continue as though no such proceeding had been taken.

**SECTION 10.5. Control of Proceedings.** Anything in this Resolution to the contrary notwithstanding, the Registered Owners of not less than twenty-five percent (25%) in principal amount of the Bonds then Outstanding hereunder shall have the right, subject to the provisions of Section 10.6 of this Resolution, by an instrument in writing executed and delivered to the Trustee, to direct the method and place of conducting all remedial proceedings to be taken by the Trustee hereunder, provided that such direction shall not be otherwise than in accordance with law or the provisions of this Resolution.

**SECTION 10.6. Restriction on Bondholder's Action.** No Registered Owner of any of the Bonds shall have any right to institute any suit, action or proceeding in equity or at law for the execution of any trust hereunder or for any other remedy hereunder unless (i) any Registered Owner previously shall have given to the Trustee written notice of the Event of Default on account of which such suit, action or proceeding is to be instituted which specifically refers to such event as an "Event of Default", (ii) the Registered Owners of not less than twenty-five percent (25%) in principal amount of the Bonds then Outstanding shall have made written request of the Trustee after the right to exercise such powers or right of action, as the case may be, shall have accrued, and shall have afforded the Trustee a reasonable opportunity either to proceed to exercise the powers hereinabove granted or to institute such action, suit or proceeding in its or their name; (iii) there shall have been offered to the Trustee reasonable security and indemnity against the costs, expenses and liabilities to be incurred therein or thereby; (iv) the Trustee shall have refused or neglected to comply with such request within a reasonable time. Such notification, request and offer of indemnity are hereby declared, in every such case at the option of the Trustee, to be conditions precedent to the execution of the powers and trusts of this Resolution or for any other remedy hereunder. It is understood and intended that no one or more Registered Owners of the Bonds hereby secured shall have any right in any manner whatever by his or their action to affect, disturb or prejudice the security of this Resolution, or to enforce any right hereunder except in the manner herein provided, and that all proceedings at law or in equity shall be instituted, had and maintained in the manner herein provided and for the benefit of all Registered Owners of such Outstanding Bonds.

Nothing contained in this Article, however, shall affect or impair the right of any Registered Owner to enforce the payment of the principal of and interest on his Bonds, or the obligation of the Authority to pay the principal of, interest on and premium, if any, on each Bond issued hereunder to the Registered Owners thereof at the time and place expressed in said Bond.

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which have theretofore become due at maturity or otherwise) and any other money received or collected by the Trustee, after making provision for the payment of any expenses necessary in its opinion to preserve the continuity of the Revenues or to provide for the continued operation of the Regional System or otherwise to protect the interests of the Registered Owners of the Bonds, and for the payment of the charges, expenses (including those of its counsel) and liabilities incurred and advances made by the Trustee in the performance of its duties hereunder, shall be applied as follows:

(a) If the principal of all of the Bonds shall not have become or have been declared due and payable,

First: To the payment to the persons entitled thereto all installments of interest then due on Bonds (with interest on overdue installments of interest then due on such Bonds, to the extent permitted by law, at the rate per annum borne by such Bonds) in the order of the maturity of such installments and, if the amount available shall not be sufficient to pay in full any installment then to the payment ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference, except as to the difference, if any, in the respective rates of interest specified in the Bonds; and

Second: To the payment to the persons entitled thereto of the unpaid principal of any Bonds which shall have become due (with interest on such Bonds at their rate from the respective dates upon which they became due) whether at maturity or by call for redemption, in the order of their due dates and, if the amount available shall not be sufficient to pay in full all the Bonds due on any date, together with such interest, then to the payment ratably, according to the amounts of principal and interest due on such dates, to the persons entitled thereto, without any discrimination or preference except as to the difference, if any, in the respective rates of interest on the Bonds.

(b) If the principal of all the Bonds shall have become or have been declared due and payable, to the payment of the principal and interest then due and unpaid upon the Bonds with interest on overdue interest and principal as provided above, without preference or priority of principal over interest or of interest over principal, or of any installment of interest over any other installment of interest, or of any Bond over any other Bond, ratably, according to the amounts due, respectively, for any principal and interest, to the persons entitled thereto without any discrimination or preference, except as to the difference, if any, in the respective rates of interest specified in the Bonds.

(c) Payments of Accrued Promissory Note Payments shall be made in accordance with the provisions of the Promissory Note.

(d) Payments of debt service on any Subordinated Indebtedness shall be made in accordance with the provisions of the Supplemental Resolution authorizing the issuance of such Subordinated Indebtedness.

Whenever money is to be applied pursuant to the provisions of this Section, such money shall be applied at such times, and from time to time, as the Trustee shall determine, having due

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regard to the amount of such money available for application and the likelihood of additional money becoming available for such application in the future. Whenever the Trustee shall apply such funds, it shall fix the date (which shall be the earliest practicable date it deems suitable and which shall be an Interest Payment Date unless it shall deem another date more suitable) upon which such application is to be made and upon such date interest on the amounts of principal to be paid on such dates shall cease to accrue. The Trustee shall give such notice as it may deem appropriate of the deposit with it of any such money and of the fixing of any such date, and shall not be required to make payment to the Holder of any Bond until such Bond shall be presented to the Trustee for appropriate endorsement or for cancellation if fully paid.

The Trustee may, in its sole discretion, hire one or more consultants experienced in the operation of water supply, transmission and distribution facilities for the purpose of determining what expenses are necessary to preserve the continuity of the Revenues or to provide for the continued operation of the Regional System. The fees and expenses of any such consultant shall be considered expenses incurred by the Trustee in the performance of its duties for purposes of this Resolution. Subject to Section 11.7 hereof, the Trustee may conclusively rely on any determination made by such consultant.

Notwithstanding anything to the contrary in this Section 10.10, the proceeds of any Credit Facility that are intended to pay the Debt Service Requirements of a particular series of Bonds shall be applied exclusively to the payment of such Debt Service Requirements and for no other purpose. Until the Credit Facility Provider shall have been reimbursed through this Resolution for the payment of such Debt Service Requirements, the Debt Service Requirements shall not be deemed to have been discharged hereunder. Furthermore, in the event that the Credit Facility Provider of any such Credit Facility shall have paid all Debt Service Requirements of the applicable series of Bonds as and when due, such Credit Facility Provider shall be surrogated to the Registered Owners of the Bonds of such series of Bonds with respect to all rights such Registered Owners may have under this Resolution, including without limitation the rights to payment under this Section 10.10.

#### ARTICLE XI

##### CONCERNING THE TRUSTEE

**SECTION 11.1. Acceptance of Trust; Abrogation of Right to Appoint Trustee.** The Trustee accepts and agrees to execute the trust hereby created, but only upon the terms set forth in this Resolution, to all of which the parties hereto and the respective holders of the Bonds agree. The Trustee shall perform only such duties as are specifically set forth in this Resolution, and no implied covenants or obligations shall be read into this Resolution against the Trustee. The right of the holders of Bonds to appoint a trustee under the Act is hereby abrogated as permitted by the Act.

**SECTION 11.2. No Responsibility for Recitals.** The recitals, statements and representations contained in the Resolution or in the Bonds, save only the Trustee's authentication upon the Bonds, shall be taken and construed as made by and on the part of the Authority, and not by the Trustee, and the Trustee assumes and shall be under no responsibility or obligation for the correctness of same.

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opinion of the Trustee such action may tend to involve expense or liability, it shall not be obligated to take such action unless it is furnished with indemnity satisfactory to it.

**SECTION 11.8. Records.** The Trustee will keep proper books of record of all transactions relating to the receipts, disbursements, allocations and applications of all funds accruing to the Trustee hereunder, and such books shall be available for inspection by the Authority, the Board or any Bondholder at reasonable hours and under reasonable conditions. Other than its duty to enforce the terms of the Resolution, the Trustee shall have no responsibility for the nonperformance of any covenant or agreement by the Authority under any such instrument, nor any duty to see to the application of insurance or condemnation proceeds.

**SECTION 11.9. Reliance on Requisitions, etc.** The Trustee may conclusively rely on and act on any requisition, resolution, notice, telegram, request, consent, waiver, certificate, statement, affidavit, voucher, bond, or other paper or document which it in good faith believes to be genuine and to have been passed or signed by the proper Persons or to have been prepared and furnished pursuant to any of the provisions of the Resolution; and the Trustee shall be under no duty to make any investigation as to any statement contained in any such instrument, but may accept the same as conclusive evidence of the accuracy of such statement.

**SECTION 11.10. Trustee May Deal in Bonds.** The Trustee may in good faith buy, sell, own, hold and deal in any of the Bonds and may join in any action which any Bondholders may be entitled to take with like effect as if the Trustee were not a party to this Resolution. The Trustee may also engage in or be interested in any financial or other transaction with the Authority; provided that if the Trustee determines that any such relation is in conflict with its duties under this Resolution it shall eliminate the conflict or resign as Trustee.

**SECTION 11.11. Advances to Cure Defaults.** If the Authority shall fail to perform any of the covenants or agreements contained in this Resolution, the Trustee may, in its uncontrolled discretion and without notice to the Bondholders, at any time and from time to time, make advances to effect performance of the same on behalf of the Authority, but the Trustee shall be under no obligation so to do; and any and all money paid or advanced by the Trustee for any such purpose, together with interest thereon at the rate equal to [the Prime Rate plus two percent (2%) per annum,] shall be repaid by the Authority immediately upon demand therefor, and until such payment by the Authority shall be a lien in favor of the Trustee upon the Revenues on a parity with the lien of the Bonds; but no such advance shall operate to relieve the Authority from any default hereunder.

**SECTION 11.12. Construction of Resolution.** The Trustee may construe any of the provisions of this Resolution insofar as the same may appear to be ambiguous or inconsistent with any other provision hereof; and any construction of any such provisions hereof by the Trustee in good faith shall be binding upon the Bondholders.

**SECTION 11.13. Resignation of Trustee.** The Trustee may resign and be discharged of the trusts created by the Resolution by written resignation filed with the Chairperson of the Authority not less than sixty (60) days before the date when it is stated to take effect; provided notice of such resignation is given to the Bondholders in the same manner as notice of redemption. Such resignation shall take effect on the day specified therein unless a successor

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**SECTION 11.3. Power to Act Through Agents; Liability Limited.** The Trustee may execute any of the trusts or powers hereof and perform the duties required by it, by or through attorneys, agents, receivers, or employees, and shall be entitled to advice of counsel concerning all matters of trust hereof and its duty hereunder, and the Trustee shall not be answerable for the default or misconduct of any such attorney, agent, or employees selected by it with reasonable care. The Trustee shall not be answerable for the exercise of any discretion or power under this Resolution or under any Supplemental Resolution, nor for anything whatever in connection with the trust, except only its own misconduct or negligence.

**SECTION 11.4. Compensation.** The Authority shall pay to the Trustee reasonable compensation for all services rendered by it hereunder and all advances, counsel fees and other expenses reasonably and necessarily made or incurred by the Trustee hereunder, all as may be mutually agreed to in writing between the Authority and the Trustee including any liability or loss except as such may result from the Trustee's willful misconduct or gross negligence. If any Event of Default shall have occurred and be continuing, the Trustee may, upon the failure by the Authority to pay any such compensation, deduct the same from any money coming into its hands (excluding the proceeds of any Credit Facility or of the remarketing of any Bonds) and shall be entitled to a preference in payment over any of the Outstanding Bonds hereunder (except from any such excluded proceeds). The Authority shall indemnify and save the Trustee harmless against any liabilities which it may incur in the exercise and performance of its powers and duties hereunder which are not due to the Trustee's willful misconduct or gross negligence.

**SECTION 11.5. No Duty to Effect or Renew Insurance.** The Trustee shall be under no duty to effect or to renew any policies of insurance, nor shall the Trustee incur any liability for the failure of the Authority to effect or renew insurance or to report claims thereunder, or be subject to any liability with respect to losses suffered from the investment of any funds on deposit with it under this Resolution, except for the safekeeping of the securities in which said funds are invested and the collection of interest thereon.

**SECTION 11.6. Notice of Default; Right to Investigate.** The Trustee shall, within ninety (90) days after the occurrence thereof, give written notice by first class mail to Registered Owners of Bonds of all Events of Default known to the Trustee to have occurred and be continuing. The Trustee shall not be deemed to have notice of any default under paragraph D or E of Section 10.1 unless notified in writing of such default by a Credit Facility Provider or the Registered Owners of at least 25% in principal amount of the Bonds then Outstanding, which notice shall specifically refer to such event as an "Event of Default". The Trustee may, however, at any time that it has reasonable cause to question the same, require of the Authority full information as to the performance of any covenant hereunder; and, if information satisfactory to it is not forthcoming, the Trustee may make or cause to be made, at the expense of the Authority, an investigation into the affairs of the Authority related to this Resolution and the parties covered thereby.

**SECTION 11.7. Obligation to Act on Defaults.** If any Event of Default of which the Trustee is deemed to have knowledge according to Section 10.1 hereof shall have occurred and be continuing, the Trustee shall exercise such of the rights and remedies vested in it by this Resolution and shall use the same degree of care in their exercise as a prudent man would exercise or use in the circumstances in the conduct of his own affairs; provided that, if in the

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Trustee is previously appointed, in which event the resignation shall take effect immediately on the appointment of such successor, and unless no successor has been appointed as of the day specified therein, in which event the resignation shall not take effect until the successor is in fact appointed. Simultaneously with the effectiveness of the appointment of a successor Trustee, the former Trustee shall transfer to the successor Trustee any existing Credit Facility then in favor of the former Trustee.

**SECTION 11.14. Removal of Trustee.** Any Trustee hereunder may be removed at any time upon thirty (30) days' written notice to the Trustee and, with regard to clause (i) hereof, to the Authority by an instrument appointing a successor to the Trustee so removed, executed by either (i) the Registered Owners of a majority in principal amount of the Bonds then Outstanding or (ii) so long as no Event of Default has occurred and is continuing, by an Authorized Representative of the Authority. Such Trustee shall continue to act as Trustee hereunder until the successor is in fact appointed. Simultaneously with the effectiveness of the appointment of a successor Trustee, the former Trustee shall transfer to the successor Trustee any existing Credit Facility then in favor of the former Trustee.

**SECTION 11.15. Appointment of Successor Trustee.** In case at any time the Trustee, or any Trustee hereinafter appointed, shall resign, or shall be removed, or be dissolved, or its property or affairs shall be taken under the control of any state or federal court or administrative body because of insolvency or bankruptcy, or for any other reason, a vacancy shall forthwith and ipso facto exist in the office of Trustee and a successor may be appointed, (i) so long as no Event of Default has occurred and is continuing, by the Authority by an instrument authorized by resolution of the Governing Board of the Authority and signed by an Authorized Representative of the Authority or (ii) if an Event of Default has occurred and is continuing, by the Registered Owners of a majority in principal amount of the Bonds then Outstanding, by an instrument or instruments in writing filed with the Chairperson of the Authority, signed by such Bondholders or by their attorneys in fact duly authorized. Copies of each instrument shall be promptly delivered by the Authority to the predecessor Trustee and to the Trustee so appointed.

Until a successor Trustee shall be appointed by the Bondholders as herein authorized, the Authority, by an instrument authorized by resolution of its Governing Board, may appoint a Trustee to fill such vacancy. After any appointment by the Authority, it shall deposit written notice of such appointment in the United States mail, first-class, postage prepaid, addressed to each Registered Owner of Bonds at the addresses appearing upon the Bond register. Any new Trustee so appointed by the Authority shall immediately and without further act be superseded by a Trustee appointed by the Bondholders in the manner above provided. In case at any time the Trustee shall resign and no appointment of a successor Trustee shall be made pursuant to the foregoing provisions of this Article prior to the date specified in the notice of resignation as the date when such resignation shall take effect, the retiring Trustee or any Bondholder may forthwith apply to a court of competent jurisdiction for the appointment of a successor Trustee. Such court may thereupon after such notice, if any, as it may deem proper and prescribe, appoint a successor Trustee.

**SECTION 11.16. Qualification of Successor Trustee.** Every successor in the trust appointed in pursuance of the provisions of this Article XI shall be any trust company or a state or national bank with trust powers, within or without the State, having capital and paid in surplus

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of at least \$50,000,000, if there be such a trust company or bank willing and able to accept the trust on reasonable and customary terms.

SECTION 11.17. Instruments of Succession. Any successor Trustee appointed hereunder shall execute, acknowledge and deliver to the Authority an instrument accepting such appointment hereunder, and thereupon such successor Trustee, without any further act, deed or conveyance, shall become fully vested with all the estates, property, rights, powers, trusts, duties and obligations of its predecessor in the trust hereunder, with like effect as if originally named Trustee herein. Upon request of such Trustee, the Trustee ceasing to act and the Authority shall execute and deliver an instrument transferring to such successor Trustee all the estates, property, rights, powers and trusts hereunder of the Trustee so ceasing to act; and the Trustee so ceasing to act shall pay over to the successor Trustee all money at the time held by it hereunder.

SECTION 11.18. Merger of Trustee. Any corporation into which any Trustee hereunder may be merged or with which it may be consolidated, or any corporation resulting from any merger or consolidation to which any Trustee hereunder shall be a party, shall be the successor Trustee under this Resolution, without the execution or filing of any paper or any further act on the part of the parties hereto, anything herein to the contrary notwithstanding.

## ARTICLE XII

### EVIDENCE OF RIGHTS OF BONDHOLDERS.

SECTION 12.1. Proof from Registered Owners. Any request, consent or other instrument required by this Resolution to be signed and executed by Bondholders may be in any number of concurrent writings of substantially similar tenor and may be signed or executed by such Bondholders in person or by agent duly appointed by an instrument in writing. Proof of the execution of any such request, consent or other instrument or writing appointing any such agent shall be sufficient for any purpose of this Resolution and shall be conclusive in favor of the Trustee and of the Authority if made in the manner provided in this Article.

SECTION 12.2. Proof of Writing. The fact and date of the execution by any Person of any such request, consent or other instrument or writing may be proved by the affidavit of a witness of such execution or by the certificate of any notary public or other officer of any jurisdiction, authorized by laws thereof to take acknowledgments of deeds, certifying that the Person signing such request, consent or other instrument acknowledged to him the execution thereof. Where such execution is by an officer of a corporation or association or a member of a partnership on behalf of such corporation, association or partnership, such affidavit or certificate shall also constitute sufficient proof of his authority.

SECTION 12.3. Proof of Bonds Held. The ownership of Bonds shall be proved by the registration books of such Bonds kept by the Trustee.

Any request, consent, vote, other instrument or action, required by this Resolution of the Registered Owner of any Bond shall bind every future Registered Owner of the same Bond and the Registered Owner of every Bond issued in exchange therefor or in lieu thereof, in respect of

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defined in the Second Supplemental Resolution) or Additional Indebtedness pursuant to Article III hereof or the issuance of a Credit Facility;

(c) to modify, amend or supplement this Resolution or any Resolution supplemental hereto in such manner as to permit the qualification hereof and thereof under the Trust Indenture Act of 1939, as amended, or any similar Federal statute hereafter in effect, and if they so determine, to add to this Resolution or any Resolution supplemental hereto such other terms, conditions and provision as may be required by said Trust Indenture Act of 1939, as amended, or similar Federal statute; provided, however, that no such modification shall adversely affect or impair the rights of the Bondholders or permit the creation of any lien prior to or on a parity with the lien of the Resolution (except as herein expressly permitted) or deprive the Bondholders of the lien created by the Resolution;

(f) to modify, amend or supplement the Resolution in such manner as may be necessary to obtain or maintain from the Rating Agencies a securities rating on the 1996A Bonds, the 1996B Bonds or any Additional Indebtedness; and

(g) to make any other change to this Resolution that affects one or more particular series of Bonds if notice by registered or certified mail, return receipt requested, of such change, including a copy of the proposed Supplemental Resolution, is given to each Holder of a Bond of such series at least thirty (30) days prior to the effective date of the Supplemental Resolution and if each such Holder shall have had at least one opportunity to require the purchase of such Bond pursuant to the terms of the Supplemental Resolution under which the particular Bonds were issued during a period beginning thirty (30) days after the giving of such notice and ending on the effective date of the Supplemental Resolution.

Any Supplemental Resolution authorized by the provisions of this Section may be executed by the Authority and the Trustee without the consent of the Registered Owners of any of the Bonds at the time Outstanding, but the Trustee shall not be obligated to enter into any such Supplemental Resolutions which affect the Trustee's rights, duties or immunities under this Resolution or otherwise.

SECTION 13.2. Supplemental Resolutions with Bondholders' Consent. With the consent of the Registered Owners of a majority in aggregate principal amount of Bonds as of the relevant Record Date, the Authority and the Trustee, may from time to time and at any time enter into an Resolution or Resolutions supplemental hereto for the purpose of adding any provisions or changing in any manner or eliminating any of the provisions of this Resolution or of any Supplemental Resolution; provided, however, that no such supplemental Resolution shall (a) extend the fixed maturity of the Bonds or reduce the rate of interest thereon or extend the time of payment of interest, or reduce the amount of the principal thereof, or reduce any premium payable on the redemption thereof, without the consent of the Registered Owner of each Bond so affected or (b) reduce the aforesaid percentage of Registered Owners of Bonds required to approve any such Supplemental Resolution. Upon receipt by the Trustee of certified resolutions authorizing the execution of any such Supplemental Resolutions, and upon the filing with the Trustee of evidence of the consent of Bondholders, as aforesaid, the Trustee shall join with the Authority in the execution of such Supplemental Resolution unless such Supplemental Resolution will affect the

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anything done or suffered to be done by the Trustee or the Authority pursuant to such request, consent or vote, whether or not notation thereof be made on any Bond issued hereunder.

SECTION 12.4. Presumptions. In determining whether the Registered Owners of the requisite aggregate principal amount of Bonds shall have occurred in any demand, request, direction, consent or waiver under this Resolution, Bonds which are owned by the Authority or by any person directly or indirectly controlling or controlled by or under common control with the Authority shall be disregarded and deemed not to be Outstanding. For the purposes of determining whether the Trustee shall be protected in relying on such demand, request, direction, consent or waiver, only Bonds which the Trustee actually knows to be so owned shall be disregarded. Bonds so owned which have been pledged in good faith may be regarded as Outstanding for the purpose of this Section if the pledgee shall establish to the satisfaction of the Trustee the pledgee's right to vote such Bonds and that the pledgee is not a person directly or indirectly controlling or controlled by or under common control with the Authority. In case of a dispute as to such right, any decision by the Trustee taken upon the advice of Counsel shall be full protection to the Trustee.

## ARTICLE XIII

### SUPPLEMENTAL RESOLUTIONS.

SECTION 13.1. Supplemental Resolutions Without Bondholders' Consent. The Authority and the Trustee from time to time, and at any time, subject to the conditions and restrictions of this Resolution may enter into Resolutions supplemental hereto, which Resolutions thereafter shall form a part hereof, for any one or more of the following purposes:

(a) to add to the covenants and agreements of the Authority under this Resolution or to surrender any right or power herein reserved or conferred upon the Authority and which shall not adversely affect the interests of the Registered Owners of the Bonds;

(b) to make such provisions for the purpose of curing any ambiguity, or of curing, correcting or supplementing any defective or inconsistent provisions contained in this Resolution, or in regard to matters or questions arising under this Resolution, or to include provisions relating to the administration of any Credit Facility or the funds and accounts established hereunder or under any Supplemental Resolution, as the Authority and the Trustee may deem necessary or desirable and which shall not adversely affect the interests of the Registered Owners of the Bonds, or for other purposes as the Authority and the Trustee may deem desirable but only if and to the extent that such Supplemental Resolution does not in any manner adversely affect or impair the rights of the Bondholders under this Resolution;

(c) to subject, describe or redescribe any property subjected or to be subjected to the lien of this Resolution;

(d) to provide for the issuance of the 1996A Bonds, the 1996B Bonds (or any amendment, modification, replacement, reissuance or refunding of the 1996B Bonds as may be authorized or required by the "Project Financing and Loan Agreement" between the Authority and "E.F.C." relating to the "Project" financed with the 1996B Bonds, as such quoted terms are

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Trustee's own rights, duties and immunities under this Resolution or otherwise, in which case the Trustee may in its discretion, but shall not be obligated to, enter into such Supplemental Resolution.

The Authority shall in its sole discretion select a Record Date in connection with obtaining the consent of Registered Owners to supplemental Resolutions. Only Registered Owners as of the close of business on said Record Date shall be entitled to consent to any such supplemental Resolution. Any such consent shall be irrevocable and binding on all subsequent transferees, whether or not such supplemental Resolution has been executed or approved by the requisite number of Registered Owners at the time of any such consent or subsequent transfer. For the purpose of determining consents, any Bond in a denomination other than the minimum Authorized Denomination for that series shall be treated as representing such number of separate Bonds of that series as is obtained by dividing the actual principal amount of such Bond by the minimum Authorized Denomination of that series. The Registered Owner of more than one Bond shall be entitled to consent or disapprove of any supplemental Resolution as holder of any Bond independent of the consent or disapproval given as holder of any other Bonds.

It shall not be necessary for the consent of the Bondholders under this Section to approve the particular form of any proposed supplemental Resolution, but it shall be sufficient if such consent shall approve the substance thereof.

SECTION 13.3. Effect of Supplemental Resolutions. Upon the execution of any Supplemental Resolution pursuant to the provisions of this Article XIII, this Resolution shall be and be deemed to be modified and amended in accordance therewith and the respective rights, duties and obligations under this Resolution of the Authority, the Trustee and all Registered Owners of Bonds Outstanding thereunder shall thereafter be determined, exercised and enforced hereunder, subject in all respects to such modifications and amendments, and all the terms and conditions of any such Supplemental Resolution shall be and be deemed to be part of the terms and conditions of this Resolution for any and all purposes.

SECTION 13.4. Opinion of Counsel as to Supplemental Resolution; Reliance on Counsel. Before the Trustee shall enter into any supplemental Resolution pursuant to Section 13.1, there shall have been delivered to the Trustee an opinion of Counsel to the effect that such supplemental Resolution (i) is authorized under this Resolution and complies with the requirements of this Article, (ii) will, upon the execution and delivery thereof, be valid and binding upon the Authority in accordance with its terms, and (iii) will not affect the exclusion from gross income of the interest on any Tax-Exempt Bonds for federal income tax purposes. The Trustee may conclusively rely upon such an opinion of Counsel.

SECTION 13.5. Voting Rights of Credit Facility Provider. As long as the Credit Facility Provider has not failed to comply with its payment obligations under the Credit Agreement, the Credit Facility Provider shall have all rights and privileges of the Holders of the Credit Facility Bonds to exercise rights of approval, consent, discretionary waiver and make all requests on behalf of and in place of such Holders. For purposes of computing applicable percentages of Bondholders under this Resolution, actions taken by such Credit Facility Provider shall be treated as action taken by the Holder of such Credit Facility Bonds.

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ARTICLE XIV

DEFEASANCE.

SECTION 14.1. Defeasance. Subject to provisions of a Supplemental Resolution that may modify this Section 14.1 insofar as it governs the Bonds authorized by such Supplemental Resolution, if the Authority shall pay or cause to be paid, in accordance with the provisions of this Resolution, to the Registered Owners of any Bond, the principal and interest and premium, if any, to become due thereon, at the times and in the manner stipulated therein and in the Resolution, then the pledge of the Trust Estate and any other money and securities hereby pledged and all other rights granted hereby shall be discharged and satisfied with respect to such Bond. In the event the Authority so provides for all Outstanding Bonds issued under this Resolution, the Trustee shall, upon the request of the Authority, execute and deliver to the Authority, all such instruments as may be desirable to evidence such discharge and satisfaction and the Trustee shall pay over or deliver, first to each Credit Facility Provider to the extent of any unreimbursed Payment Obligations, and then to the Authority, all money or securities held by it pursuant to the Resolution which are not required for the payment or redemption of Bonds not theretofore surrendered for such payment or redemption.

Notwithstanding the release and discharge of the Lien of this Resolution as provided above, those provisions of this Resolution and any applicable Supplemental Resolution relating to the maturity of the Bonds, interest payments and dates thereof, tender and purchase provisions, exchange and transfer of Bonds, replacement of mutilated, destroyed, lost or stolen Bonds, the safekeeping and cancellation of Bonds, nonpresentation of Bonds, the holding of moneys in trust, and the duties of the Trustee, Tender Agent and Remarketing Agent in connection with all of the foregoing, remain in effect and shall be binding upon the Trustee, Tender Agent, Remarketing Agent, Issuer and the Bondholders.

Any Bond for the payment or redemption of which funds shall have been set aside and shall be held in trust by the Trustee (through deposit of funds for such payment or redemption or otherwise) whether at or prior to the maturity or redemption date thereof shall be deemed to have been paid within the meaning and with the effect expressed in the first sentence of this Section. Subject to provisions of a Supplemental Resolution that may modify this Section 14.1 insofar as it governs the Bonds authorized by such Supplemental Resolution, any Outstanding Bond 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 first sentence of this Section if (i) in case any of said Bonds are to be redeemed on any date prior to their maturity, the Authority shall have given to the Trustee in form satisfactory to it irrevocable instructions to give notice of redemption of such Bonds on said date as provided herein, (ii) there shall have been deposited with the Trustee either money in an amount which shall be sufficient, or noncallable Investment Securities of the type listed in subparagraphs (a), (b), or (n) of the definition of Investment Securities, the principal of and the interest on which when due will provide money which, together with the money, if any, deposited with the Trustee at the same time, shall be sufficient to pay when due the principal, premium, 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 (iii) if said Bonds are not by their terms subject to redemption within the next succeeding sixty (60) days and such Bonds are to be redeemed the Authority shall have given the Trustee in form satisfactory to it irrevocable instructions to give

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notice to the Registered Owners of such Bonds that the deposit required by (ii) above has been made in accordance with this Section and stating such maturity or redemption date upon which money is to be available for the payment of the principal and premium, if applicable, on said Bonds. Neither Investment Securities or money deposited with the Trustee pursuant to this Section, nor principal or interest payable on any such Investment Securities, shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal or premium, if applicable, and interest on said Bonds; provided that any cash received from such principal or interest payments on such Investment Securities deposited with the Trustee, if not then needed for such purpose, shall, at the written direction of the Authority and to the extent practicable, be reinvested in Investment Securities of the type hereinbefore described in this paragraph maturing at times and in amounts sufficient, together with other money available for the purpose, to pay when due the principal, premium, if applicable, and interest to become due on said Bonds on and prior to the redemption date or maturity date thereof, as the case may be, and interest earned from such reinvestments shall be paid over to the Authority, as received by the Trustee, free and clear of any trust, lien or pledge, provided, further that any Investment Securities may be sold, transferred, redeemed or otherwise disposed of, and the proceeds thereof applied to the purchase of other Investment Securities of the type permitted for this purpose, the principal of and interest on which, when due, together with money and other Investment Securities then held by the Trustee for such purpose shall be sufficient to pay when due the principal, premium, if applicable, and interest due and to become due on said Bonds on or prior to the redemption date or maturity date thereof, as the case may be.

Anything in the Resolution to the contrary notwithstanding and except as the escheat laws of the State may otherwise provide, any money held by the Trustee in trust for the payment and discharge of any of the Bonds which remain unclaimed for four years after the date when all of the Bonds have become due and payable, either at their stated maturity dates or by call for earlier redemption; if such money were held by the Trustee at such date, or for four years after the date of deposit of such money if deposited with the Trustee after the said date when all of the Bonds become due and payable, shall, at the written request of the Authority, be repaid by the Trustee to the Authority, as its or their absolute property and free from trust, and the Trustee shall thereupon be released and discharged; provided, however, that before being required to make any such payment, the Trustee shall, at the expense of the Authority, cause to be published once in an Authorized Newspaper, notice that said money remains unclaimed and that, after a date named in said notice, which date shall be not less than ten (10) nor more than twenty (20) days after the date of first publication of such notice, the balance of such money then unclaimed will be returned to the Authority as provided above.

SECTION 14.2. Surplus Funds. Any surplus money held by the Trustee after all obligations arising under the Bonds and this Resolution have been paid shall be transferred to the Board.

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ARTICLE XV

MISCELLANEOUS PROVISIONS.

SECTION 15.1. Benefit of Covenants. All the covenants, stipulations, promises and agreements in this Resolution contained by or on behalf of the Authority shall bind and inure to the benefit of its successors and assigns, whether so expressed or not.

SECTION 15.2. No Further Beneficiaries. Nothing expressed or implied in this Resolution or in the Bonds is intended or shall be construed to give to any person other than the parties hereto, any Credit Facility Providers, and the Registered Owners of the Bonds issued hereunder, any legal or equitable right, remedy or claim under or in respect of this Resolution or any covenants, conditions or provisions therein or herein contained.

SECTION 15.3. Waiver of Notice. Whenever in this Resolution the giving of notice by mail or otherwise shall be required, the giving of such notice may be waived in writing by all Persons entitled to receive such notice, and in any such case the giving or receipt of such notice shall not be a condition precedent to the validity of any action taken in reliance upon such waiver.

SECTION 15.4. Severability. In case any one or more of the provisions contained in this Resolution or in the Bonds shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Resolution or the Bonds, but this Resolution or the Bonds shall be construed as if such invalid or illegal or unenforceable provision had never been contained herein or therein.

SECTION 15.5. Substitute Notice. If for any reason it shall be impossible to make publication of any notice required hereby in an Authorized Newspaper, then such publication in lieu thereof as shall be made with the approval of the Trustee shall constitute a sufficient publication of such notice.

SECTION 15.6. Notices. Except as otherwise provided herein, all notices, demands, requests, consents, certificates, directions, elections and waivers pursuant to any provision of this Resolution shall be in writing and sent by United States registered or certified mail, return receipt requested, postage prepaid, or alternatively, by hand delivery, addressed to the Authority as follows:

Upper Mohawk Valley Regional Water Finance Authority  
One Kennedy Plaza  
Utica, New York 13502  
Attention: Chairperson

and to the Trustee as follows:

United States Trust Company of New York  
114 West 47th Street  
New York, New York 10036  
Attention: Corporate Trust and Agency Division

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and to Moody's as follows:

Moody's Investors Services, Inc.  
Public Finance Department  
99 Church Street  
New York, New York 10007

and to S & P as follows:

Standard & Poor's Corporation  
25 Broadway, 20th floor  
New York, New York 10004

or to such other address as the party to receive the communication may hereafter designate by written notice to all other Persons listed above. Copies of all notices shall be sent to the Trustee at its address above. All notices shall be deemed to have been given hereunder on the day following mailing thereof in accordance with the requirements of this Section, except for telephonic notice pursuant to specific provisions hereof authorizing such notice or notice by hand delivery, which shall be deemed given immediately.

SECTION 15.7. Successors and Assigns. All the covenants, promises and agreements contained in this Resolution by or on behalf of the Authority, or by or on behalf of the Trustee, shall bind and inure to the benefit of their respective successors and assigns, whether so expressed or not.

SECTION 15.8. Headings for Convenience Only. The descriptive headings herein are inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

SECTION 15.9. Counterparts. This Resolution may be executed in any number of counterparts, each of which when so executed and delivered shall be an original, but such counterparts shall together constitute but one and the same instrument.

SECTION 15.10. Payments on Weekends, Holiday. Whenever the date fixed for the payment of the principal or redemption price of or the interest on any Bonds falls on any date that is not a Business Day, then the payment of principal, redemption price or interest need not be made on such date, but may be made on the next-succeeding regular Business Day with the same force and effect as if made on the date fixed, and no interest shall accrue on such payment to the date payment is made.

SECTION 15.11. No Personal Liability. No recourse under or upon any obligation, covenant or agreement contained in this Resolution or in any Bond hereby secured, or under any judgment obtained against the Authority or by the enforcement of any assessment or by any legal or equitable proceeding by virtue of any constitution or statute or otherwise, or under any circumstances, under or independent of this Resolution, shall be had against any member, officer or employee, as such, past, present or future, of the Authority for the payment for or to the Authority or any receiver thereof, or for or to the Registered Owners of any Bonds issued hereunder or otherwise, of any sum that may be due and unpaid by the Authority upon any such Bond. Any and all personal liability of every nature, whether at common law or in equity, or by

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statute or by constitution or otherwise, of any such member, officer or employee of the Authority as such, to respond by reason of any act or omission on his part or otherwise, for the payment for or to the Registered Owner of any Bond issued thereunder or otherwise, of any sum that may remain due and unpaid upon the Bonds and hereby secured or any of them, is hereby expressly waived and released as a condition of and consideration for the execution of this Resolution and the issuance of such Bond.

SECTION 15.12. No Indebtedness Created. Neither the State, Oneida County nor any other municipality or public corporation shall be liable for the payment of the principal of or interest on any of the Bonds issued hereunder, or for the performance of any pledge, mortgage, obligation or agreement or indebtedness of the Authority, and none of the Bonds of the Authority issued hereunder shall be construed to constitute an indebtedness of said State, Oneida County or any other municipality or public corporation.

SECTION 15.13. Agreement of the State. There is hereby incorporated in this Resolution by this reference, fully as if set forth herein at length, the agreement of the State with the Registered Owners of Bonds set forth in Section 1226-q of the Act.

SECTION 15.14. Governing Law. This Resolution shall be governed exclusively by the provisions hereof and by the applicable laws of the State without reference to conflict of law provisions.

SECTION 15.15. Consents. Whenever the consent of any Person is required pursuant to the terms of this Resolution, the same shall not be unreasonably withheld.

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SECTION 15.16. Construction of Delivery by Trustee or Tender Agent. Any reference herein to delivery of Bonds by the Trustee or the Tender Agent shall be understood to mean only that the Trustee or the Tender Agent, as the case may be, shall make the Bond or Bonds available for pick-up during normal business hours at its principal corporate trust office in New York, New York.

SECTION 15.17. Action by Authority or Credit Facility Provider. Except as otherwise expressly stated herein, any action to be taken hereunder or under any Supplemental Resolution by the Authority or Credit Facility Provider may be taken by an Authorized Representative thereof.

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**Form of Fourteenth Supplemental Resolution**

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## FOURTEENTH SUPPLEMENTAL RESOLUTION

THIS IS THE FOURTEENTH SUPPLEMENTAL RESOLUTION dated as of March 1, 2023 by and between the Upper Mohawk Valley Regional Water Finance Authority, a body corporate and politic constituting a public benefit corporation of the State of New York (the "Authority"), and The Bank of New York Mellon, as successor to the United States Trust Company of New York, a bank and trust company organized and existing under the laws of the State of New York, having an office and place of business at 101 Barclay Street, New York, New York 10286 (the "Trustee"), under and supplemental to that certain Resolution (defined herein) dated as of December 1, 1996 and by and between the Authority and the Trustee (this "Fourteenth Supplemental Resolution").

### WITNESSETH:

WHEREAS, the Authority is a body corporate and politic, constituting a public benefit corporation of the State of New York, created under Title 10 of Article 5 of the Public Authorities Law (the "Act"); and

WHEREAS, the Authority and the Trustee have entered into a Water System General Revenue Bond Resolution dated as of December 1, 1996 (the "General Resolution" and as modified, amended or supplemented, the "Resolution"), to which this Fourteenth Supplemental Resolution is supplemental; and

WHEREAS, the Authority has resolved to issue its Water System Revenue Bonds, Series 2023 (Green Bonds) (the "Series 2023 Bonds") in the aggregate principal amount of \$ \_\_\_\_\_; and

WHEREAS, the execution and delivery of the Series 2023 Bonds and this Fourteenth Supplemental Resolution have been duly authorized and all things necessary to make the Series 2023 Bonds, when executed by the Authority and authenticated by the Trustee, valid and binding legal obligations of the Authority and to make this Fourteenth Supplemental Resolution a valid and binding agreement have been done;

NOW, THEREFORE, THIS FOURTEENTH SUPPLEMENTAL RESOLUTION WITNESSETH, that the Authority and the Trustee for good and valuable consideration, receipt and sufficiency of which they each hereby acknowledge, do hereby agree as follows:

### ARTICLE I

#### DEFINITIONS

Terms not defined herein shall have the meanings ascribed to them in the Resolution. The following terms shall have the meanings provided below when used in this Fourteenth Supplemental Resolution.

"2023 Project" means the financing of capital projects including those described in Schedule 1 to the Amendment to Financing Agreement, dated as of March 1, 2023, by and between the Authority and the Board.

"Authorized Denominations" means, with respect to the Series 2023 Bonds, a minimum denomination of \$5,000 and integral multiples thereof.

"Board" means the Upper Mohawk Valley Regional Water Board.

"Bond Purchase Agreement" means that certain Contract of Purchase dated February \_\_, 2023 by and between the Authority and Raymond James & Associates, Inc., as underwriter, with respect to the sale by the Authority of the Series 2023 Bonds.

"Bond Register System Conversion Date" means the date for conversion of the ownership of Series 2023 Bonds to the Bond Register System specified in accordance with Section 2.8 hereof.

"Closing Date" means that date on which the Series 2023 Bonds are first authenticated and delivered pursuant hereto.

"Continuing Disclosure Undertaking" means, with respect to the Series 2023 Bonds, a written agreement entered into by the Authority, for the benefit of the Holders of such Series 2023 Bonds, to comply with Rule 15c2-12(b)(5) of the Securities Exchange Act of 1934, as in effect on such date.

"Interest Payment Date" shall have the meaning set forth in Section 2.2(b) hereof.

"Investment Securities" means, with respect to the Series 2023 Bonds, Investment Securities (as defined in the General Resolution).

"Maturity" when used with respect to a Series 2023 Bond means the date on which the principal of such Series 2023 Bond becomes due and payable as therein or herein provided, whether at the maturity dates for the Serial Bonds and the Term Bonds set forth in Section 2.2 hereof, or declaration of acceleration, call for redemption or otherwise.

"MSRB" means the Municipal Securities Rulemaking Board.

"Paying Agent" means the paying agent or paying agents appointed by the Authority under this Fourteenth Supplemental Resolution, and shall initially mean the Trustee.

"Record Date" means the fifteenth (15th) day of the month, whether or not a Business Day, immediately preceding each Interest Payment Date.

"Serial Bonds" means those Series 2023 Bonds other than the Term Bonds, if any.

"Series 2023 Bond" or "Series 2023 Bonds" means any bond or bonds authenticated and delivered under this Fourteenth Supplemental Resolution, in substantially the form attached

hereto as Exhibit A, being the fourteenth series of Indebtedness issued under the Resolution by the Authority.

"Tax Certificate" means the Tax Certificate, relating to the Series 2023 Bonds, as to arbitrage and the provisions of Sections 103 and 141-150 of the Internal Revenue Code of 1986, as amended, executed and delivered by the Authority and the Board on the Closing Date.

"Term Bonds" means the Series 2023 Bonds which shall be subject to retirement pursuant to mandatory Sinking Fund Installments.

The words "hereof," "herein," "hereto," "hereby" and "hereunder" (except in the form of Series 2023 Bond) refer to the entire Resolution.

### ARTICLE II

#### THE SERIES 2023 BONDS

##### Section 2.1. Purpose, Amount, Date, Terms and Issuance of Series 2023 Bonds.

(a) The Series 2023 Bonds are hereby authorized to be issued under the Resolution and this Fourteenth Supplemental Resolution. The purpose of the Series 2023 Bonds will be to provide the Authority with funds to (i) finance the 2023 Project (ii) fund the debt service reserve fund, (iii) pay for capitalized interest on the Series 2023 Bonds, and (iv) pay the costs of issuance of the Series 2023 Bonds. The Series 2023 Bonds shall be issued in the aggregate principal amount of \$ \_\_\_\_\_ and shall contain substantially the terms recited in the form of Series 2023 Bond attached hereto as Exhibit A. The Series 2023 Bonds shall be dated the Closing Date.

(b) A portion of the 2023 Project, in the amount of \$5 million for construction of two raw water pipe bridges from Hinckley Reservoir to the Authority's Water Treatment Plant, has been determined by the Authority to be reasonably necessary to service new manufacturing facilities and will be issued under a separate bond cap as described in Section 1226-l(b) of the Act (the "Manufacturing Bond Cap").

(c) The Authority shall cause a copy of the opinion of Bond Counsel delivered in connection with the original issuance of the Series 2023 Bonds to be delivered to the Trustee.

(d) Pursuant to recommendations promulgated by the Committee on Uniform Security Identification Procedures, "CUSIP" numbers may be printed or typed on the Series 2023 Bonds. The Series 2023 Bonds may bear such endorsement or legend satisfactory to the Trustee as may be required to conform to usage or law with respect thereto.

(e) The Authority may issue the Series 2023 Bonds upon the execution of this Fourteenth Supplemental Resolution. Each maturity of the Series 2023 Bonds shall be issued in one fully registered form, without coupons, in the name of Cede & Co., as nominee for the Depository Trust Company of New York, New York, which shall act as Depository for the Series 2023 Bonds. The Series 2023 Bonds shall be available to investors in book-entry form only until the

Bond Register Regional System Conversion Date. The Trustee shall authenticate and deliver the Series 2023 Bonds upon receipt of written direction from the Authority to do so.

(f) The Series 2023 Bonds shall be in denominations and shall bear interest for the times and at the rates as provided in Section 2.2 hereof and shall have the provisions with respect to redemption as provided in Section 2.3 hereof.

##### Section 2.2. Designation, Maturity, Denominations and Interest Rates of the Series 2023 Bonds.

(a) The Series 2023 Bonds, as initially issued: (i) shall be designated "Upper Mohawk Valley Regional Water Finance Authority Water System Revenue Bonds, Series 2023 (Green Bonds)"; (ii) shall be issued as fully registered Series 2023 Bonds without coupons and shall be in Authorized Denominations, and (iii) shall be numbered consecutively from one (1) upward but need not be authenticated or delivered in numerical order.

(b) Interest on the Series 2023 Bonds will be payable on each April 1 and October 1 (each, an "Interest Payment Date"), commencing October 1, 2023. The Series 2023 Bonds will bear interest from the Closing Date.

(c) The Series 2023 Bonds shall mature on April 1 in the years and in the aggregate principal amounts and shall bear interest, determined on the basis of a year of 360 days consisting of 12 months of 30 days each, at the rates per annum set forth below:

Series 2023 (Green Bonds)

Series 2023 Serial Bonds

<u>Maturity</u>	<u>Amount</u>	<u>Interest Rate</u>
	\$	%

\$ \_\_\_\_\_ % Term Bond Maturing \_\_\_\_\_

Section 2.3. Redemption of the Series 2023 Bonds.

(a) Mandatory Redemption of the Series 2023 Bonds. The Series 2023 Bonds maturing \_\_\_\_\_ are subject to mandatory redemption in part, on each of the dates and in the respective principal amounts set forth below, at a redemption price of 100% of the principal amount thereof together with the interest accrued thereon to the date fixed for redemption from mandatory Sinking Fund Installments. The following mandatory Sinking Fund Installment amounts and dates for such Term Bond are hereby established:

<u>Series 2023 Term Bond</u>
<u>Maturing on _____</u>
<u>Principal Amount</u>
\$ _____

\*  
\*Final Maturity.

Any Sinking Fund Installment may, at the option of the Finance Authority, be reduced by all or any portion of the principal amount of Series 2023 Bonds of the Series and maturity subject to redemption therefrom that have been acquired or redeemed otherwise than by

Section 2.6. Repair Reserve Requirement. The Authority has determined that the Repair and Improvement Fund is currently funded at or in excess of the Repair Reserve Requirement as established by the Resolution. Accordingly, the Authority reaffirms the requirement for said fund and hereby determines that no proceeds from the Series 2023 Bonds shall be deposited into such fund.

Section 2.7. Debt Service and Sinking Fund. The Trustee shall create a new account in the Debt Service and Sinking Fund to be designated the "2023 Debt Service Account", pursuant to Section 5.5 of the General Resolution.

Section 2.8. Bond Register System Conversion. Effective (i) upon the resignation of any institution acting as Depository hereunder, provided that the Authority is unable to identify a successor Depository prior to the effective date of such resignation, or (ii) upon a date specified by the Authority in a determination made by the Authority that continuation of any institution in the role of Depository is not in the best interests of the Beneficial Owners or the Authority, the Authority shall discontinue the Book-Entry System and convert to a Bond Register System of ownership for the Series 2023 Bonds (each, a "Bond Register System Conversion Date"). In such event the Authority shall effect this conversion in the manner specified in "Provisions for Bond Register System" in Section 2.7 of the General Resolution. This conversion shall be effected pursuant to arrangements for the surrender of a single Series 2023 Bond for a Series 2023 Bond by the Depository and the issuance of Series 2023 Bonds to Registered Owners that are reasonably satisfactory to the Trustee, which arrangements shall be communicated by the Trustee to the Depository on behalf of the Beneficial Owners in the same manner as specified in "Provisions for Bond Register System" in Section 2.7 of the General Resolution and shall become effective hereunder and binding upon the Authority, the Trustee and all Registered Owners and Beneficial Owners on the Bond Register Conversion Date.

ARTICLE III

MISCELLANEOUS

Section 3.1. No Rights Conferred on Others. Nothing herein contained shall confer any right upon any person other than the parties hereto and the Bondowners of the Series 2023 Bonds.

Section 3.2. Illegal, etc. Provisions Disregarded. In case any provision in this Fourteenth Supplemental Resolution or the Series 2023 Bonds shall for any reason be held invalid, illegal or unenforceable in any respect, this Fourteenth Supplemental Resolution or the Series 2023 Bonds, as the case may be, shall be construed as if such provision had never been contained herein or thereon.

Section 3.3. Notice to Rating Agencies. Upon the occurrence of: (1) a change in the Trustee; (2) any material change in the Resolution; or (3) the redemption or defeasance of all Bonds; the Trustee shall give immediate notice to any Rating Agency then providing a bond rating for the Series 2023 Bonds.

application of Sinking Fund Installments and have not previously been applied to such a redemption.

(b) Optional Redemption of Series 2023 Bonds. The Series 2023 Bonds maturing on or after \_\_\_\_\_ are subject to redemption prior to maturity at the option of the Authority as a whole at any time or in part on any date on or after \_\_\_\_\_ at 100% of the principal amount thereof plus accrued interest.

(c) In the event any of the Series 2023 Bonds are to be redeemed, the Trustee shall cause notice to be given to the Holders of the Series 2023 Bonds to be redeemed as specified in Section 7.2 of the General Resolution, provided that the Authority shall give the Trustee notice of such redemption at least thirty-five (35) days prior to such redemption instead of the period specified in such Section 7.2. So long as the book-entry only system for the Series 2023 Bonds is in effect, if less than all of the Series 2023 Bonds of any one maturity shall be called for redemption, the particular Series 2023 Bonds and Authorized Denominations thereof to be redeemed shall be selected by DTC and its Participants in such manner as DTC and its Participants may determine. If the book-entry only system for the Series 2023 Bonds is no longer in effect, selection for redemption of less than all of the Series 2023 Bonds of any one maturity within a series will be made by the Trustee by lot. In the event of redemption of less than all of the Series 2023 Bonds other than by application of Sinking Fund Installments, the maturity or maturities to be redeemed shall be selected by the Authority.

Section 2.4. Disposition of Proceeds of Series 2023 Bonds and Other Available Funds.

On the Closing Date, the Trustee shall:

(a) deposit \$ \_\_\_\_\_ of the proceeds of the Series 2023 Bonds in a new account hereby created and established in the Construction Fund to be designated the "2023 Project Account" to pay Costs of the 2023 Project;

(b) deposit \$ \_\_\_\_\_ from the proceeds of the Series 2023 Bonds in a new account hereby created and established and designated the "2023 Debt Service Account" established in the Debt Service and Sinking Fund to pay for capitalized interest of the Series 2023 Bonds;

(c) deposit a total of \$ \_\_\_\_\_ (which includes \$ \_\_\_\_\_ in additional proceeds), which will be used to pay for the costs of issuance of the Series 2023 Bonds, in the Costs of Issuance Fund; and

(d) transfer \$ \_\_\_\_\_ in excess amounts held in the \_\_\_\_\_ Account of the Debt Service Reserve Fund to the Debt Service and Sinking Fund.

Section 2.5. Debt Service Reserve Requirement. The Authority has determined that, after giving effect to the deposits or transfers set forth in Section 2.4 above, the Debt Service Reserve Fund is currently funded at \$ \_\_\_\_\_. The Authority hereby determines that such amount satisfies the aggregate Debt Service Reserve Requirement as established by the Resolution.

Section 3.4. Notices. Except as otherwise provided herein, any notice, request, complaint, demand, communication or other paper shall be sufficiently given and shall be deemed given when delivered or mailed by first class mail, postage prepaid, or sent by telegram or telex, addressed to the parties as follows:

Authority:	Upper Mohawk Valley Regional Water Finance Authority One Kennedy Plaza Utica, New York 13502 Attention: Chairperson
Trustee:	The Bank of New York Mellon Corporate Trust Administration 240 Greenwich Street, Floor 7 East New York, NY 10286
Moody's:	Moody's Investors Service 99 Church Street New York, New York 10007 Attention: Municipal Finance
S&P:	S&P Global Ratings 55 Water Street New York, New York 10041 Attention: Municipal Finance

The above parties may, by notice given hereunder, designate any further or different addresses to which subsequent notices, certificates or other communications shall be sent.

Section 3.5. Successors and Assigns. All the covenants, promises and agreements in this Fourteenth Supplemental Resolution contained by or on behalf of the Authority, or by or on behalf of the Trustee, shall bind and inure to the benefit of their respective successors and assigns, whether so expressed or not.

Section 3.6. Headings for Convenience Only. The descriptive headings in this Fourteenth Supplemental Resolution are inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

Section 3.7. Counterparts. This Fourteenth Supplemental Resolution may be executed in any number of counterparts, each of which when so executed and delivered shall be an original; but such counterparts shall together constitute but one and the same instrument.

Section 3.8. Applicable Law. This Fourteenth Supplemental Resolution shall be governed by and construed in accordance with the laws of the State of New York.

Section 3.9. Designation of Paying Agent for Series 2023 Bonds. The Trustee is hereby designated as Paying Agent for the Series 2023 Bonds.

Section 3.10. Tax Covenant. The Authority shall comply with each requirement of the Internal Revenue Code of 1986 (the "Code") necessary to maintain the exclusion of interest on the Series 2023 Bonds from gross income for federal income tax purposes. In furtherance of the covenant contained in the preceding sentence, the Authority shall comply with the provisions of the Tax Certificate executed by the Authority on the date of initial issuance and delivery of the Series 2023 Bonds, as such Tax Certificate may be amended from time to time, as a source of guidance for achieving compliance with the Code. Notwithstanding any other provision of the Resolution to the contrary, the covenants contained in this Section 3.10 shall survive the payment of the Series 2023 Bonds and the interest thereon, including any payment or defeasance thereof pursuant to the Resolution, for as long as necessary to maintain the exclusion from gross income of the interest on the Series 2023 Bonds for federal income tax purposes.

Section 3.11. Appointment of Bond Counsel. In accordance with the General Resolution, the Authority has appointed Norton Rose Fulbright US LLP as its Bond Counsel.

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**Financing Agreement and Form of Amendment**

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(This Table of Contents is not part of this Financing Agreement and is for convenience of reference only)

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UPPER MOHAWK VALLEY REGIONAL WATER BOARD,

and

THE CITY OF UTICA, NEW YORK,  
ACTING FOR THE CITY AND THE UTICA BOARD OF WATER SUPPLY

FINANCING AGREEMENT

DATED AS OF

October 30, 1996

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FINANCING AGREEMENT

THIS FINANCING AGREEMENT dated as of October 30, 1996 by and among the UPPER MOHAWK VALLEY REGIONAL WATER FINANCE AUTHORITY, a body corporate and politic constituting a public benefit corporation of the State, the UPPER MOHAWK VALLEY REGIONAL WATER BOARD, a body corporate and politic constituting a corporate municipal instrumentality of the State, and the CITY OF UTICA, NEW YORK, a municipal corporation of the State, acting for the City and the UTICA BOARD OF WATER SUPPLY;

W I T N E S S E T H:

WHEREAS, the Authority was created pursuant to the Act, and is vested with the powers and duties described in the Act, including the power to borrow money, issue debt and enter into agreements with the Board, and any Municipality, including the City, for the leasing and financing by the Authority of Projects, including the System and, in the aggregate, the Regional System; and

WHEREAS, the Board was created and, pursuant to the Act, the Board is authorized to enter into agreements with the Authority, and any Municipality, including the City, to provide a means whereby the Authority shall finance the cost of Constructing Projects, including the System and, in the aggregate, the Regional System, and the Board may (A) agree to assume title to any such Project and lease the same to the Authority, (B) operate and maintain any such Project, and (C) raise Revenues from users through fees, rates, rents or other service charges necessary or appropriate to secure such financing and to pay the cost of the operation and maintenance of any Projects, including the System and, in the aggregate, the Regional System; and

WHEREAS, pursuant to the Act, the Authority, the Board, and any Municipality, including the City, are authorized to enter into an agreement for the Construction and financing of Projects, including an agreement or agreements to transfer Projects from any Municipality, including the City, to the Board, for use in the exercise of the corporate powers and purposes of the Board; and

WHEREAS, the City, pursuant to the terms of the Sale Agreement, has sold, transferred and otherwise conveyed the City's and the Utica Board of Water Supply's title and interest in the System to the Board, which Sale Agreement is an integral

(iv)

part of this Financing Agreement and which, while prepared as an exhibit for simplicity of drafting and execution purposes, is incorporated in full into this Financing Agreement to the same extent and with the same force and effect as if it were a Section hereof; and

WHEREAS, Section 1226-h(3) of the Act provides that upon the execution of the Sale Agreement the power of the City to levy user fees, rents and other charges from the System is annulled; and

WHEREAS, the Board has, pursuant in the terms of this Financing Agreement, leased its title and interest in the Regional System to the Authority as security for the Authority's Bonds and the Authority has appointed the Board the operator of the Regional System to permit the Board to operate and maintain the Regional System; and

WHEREAS, pursuant to the provisions of the Act, (A) the Board by resolution has duly authorized the Chairman or Vice Chairman of the Board to execute and deliver this Financing Agreement, including the Sale Agreement, on behalf of the Board, (B) the Authority by resolution has duly authorized the Chairman or Vice Chairman of the Authority to execute and deliver this Financing Agreement on behalf of the Authority and (C) the Common Council and Board of Estimate and Apportionment of the City have authorized the Mayor of the City, for and on behalf of the Utica Board of Water Supply and the City, to execute and deliver this Financing Agreement, including the Sale Agreement, for and on behalf of the Utica Board of Water Supply and the City;

NOW, THEREFORE, IN CONSIDERATION OF THE PREMISES AND OF THE MUTUAL COVENANTS HEREINAFTER CONTAINED, THE PARTIES HERETO FORMALLY COVENANT, AGREE AND BIND THEMSELVES AS FOLLOWS:

ARTICLE I.  
DEFINITIONS

SECTION 1.1. DEFINITIONS. (A) The following words and terms used in this Financing Agreement shall have the respective meanings set forth below unless the context or use clearly indicates another or different meaning or intent:

"Account" shall mean any of the special accounts created and established pursuant to the Resolution and/or the Financing Agreement.

"Accrued Debt Service" shall have the meaning ascribed thereto in the Resolution.

"Accrued Principal" shall have the meaning ascribed thereto in the Resolution.

"Accrued Promissory Note Payment" shall have the meaning ascribed thereto in the Resolution.

"Acquisition Date" shall mean the date of the conveyance of Projects by the City, acting for the Utica Board of Water Supply and the City, or the Municipalities to the Board pursuant to the Sale Agreement or Purchase Agreements.

"Act" shall have the meaning ascribed thereto in the Resolution.

"Additional Parity Indebtedness" shall have the meaning ascribed thereto in the Resolution.

"Aggregate Debt Service" shall mean, for any Fiscal Year, as of any date of calculation, the sum of the Debt Service for all Bonds outstanding under the Resolution during such Fiscal Year.

"Annual Budget" shall mean the annual budget of the Board, as amended or supplemented, adopted or in effect for a particular Fiscal Year, as provided in Section 6.6 of the Financing Agreement.

"Appendix A" shall mean Appendix A to the Financing Agreement describing the Projects, including the System, as the same may be amended from time to time in accordance with the provisions of the Financing Agreement.



"Authority" shall mean the Upper Mohawk Valley Regional Water Finance Authority, a body corporate and politic constituting a public benefit corporation of the State, created and existing under and by virtue of the provisions of the Act.

"Authority Budget" shall mean the annual budget of the Authority adopted or in effect for a particular Fiscal Year pursuant to the provisions of the Resolution, as amended or supplemented pursuant to the provisions of the Resolution.

"Authority Expenses" shall have the meaning ascribed thereto in the Resolution.

"Authorized Representative" shall have the meaning ascribed thereto in the Resolution.

"Bank" shall mean the bank, trust company or banking association (which may be the Trustee) designated by the Board to act as depository for the funds of the Board.

"Board" shall mean the Upper Mohawk Valley Regional Water Board, a body corporate and politic constituting a corporate municipal instrumentality of the State created and existing under and by virtue of the Act.

"Bond" or "Bonds" shall have the meaning ascribed thereto in the Resolution.

"Bond Redemption and Accumulated Surplus Fund" shall mean the Bond Redemption and Accumulated Surplus Fund established pursuant to the Resolution.

"Bondholder" or "Bondholders" shall have the meaning ascribed thereto in the Resolution.

"Budget Documents" shall have the meaning set forth in Section 6.6(B) of the Financing Agreement.

"Capitalized Interest Account" shall have the meaning ascribed thereto in the Resolution.

"City" shall mean the City of Utica, New York, Oneida County, a municipal corporation of the State.

"Construction" shall have the meaning assigned such term in subsection 7 of Section 1226-b of the Act.

"Construction Fund" shall mean the Construction Fund established pursuant to the Resolution.

"Independent" shall have the meaning ascribed thereto in the Resolution.

"Municipality" shall have the meaning ascribed thereto in the Resolution.

"1996A Bonds" and "1996B Bonds" shall each have the meaning ascribed thereto in the Resolution.

"Operating Expenses" shall have the meaning ascribed thereto in the Resolution.

"Operating Fund" shall mean the Operating Fund established pursuant to the Resolution.

"Operation Account" shall mean the Regional Water Board Operation Account established within the Regional Water Fund by, and held in the custody of, the Board pursuant to Section 4.2(A)(1) of the Financing Agreement.

"Permitted Encumbrances" shall have the meaning ascribed thereto in the Resolution.

"Pilot Payments" shall have the meaning ascribed thereto in the Resolution.

"Pilot Payments Fund" shall mean the Pilot Payments Fund established pursuant to the Resolution.

"Pledged Revenues" shall have the meaning ascribed thereto in the Resolution.

"Project" shall have the meaning ascribed thereto in the Act.

"Projected Debt Service" shall mean, for any Fiscal Year or part thereof, as of any date of calculation, and with respect to any Projected Series of Bonds, an amount (set forth by the Authority in the Authority Budget as provided in Section 6.6 of the Financing Agreement) equal to the Debt Service estimated by the Authority to be payable during such Fiscal Year or part thereof on such Projected Series of Bonds.

"Projected Series of Bonds" or "Projected Series" shall mean any series of Bonds described in the Authority Budget as anticipated to be issued in the Fiscal Year to which such Authority Budget relates.

"Cost" or "Cost of a Project" means "Costs" as defined in the Act.

"Credit Facility" shall have the meaning ascribed thereto in the Resolution.

"Credit Facility Provider" shall have the meaning ascribed thereto in the Resolution.

"Debt Service and Sinking Fund" shall mean the Debt Service and Sinking Fund established pursuant to the Resolution.

"Debt Service Requirements" shall have the meaning ascribed thereto in the Resolution.

"Debt Service Reserve Fund" shall mean the Debt Service Reserve Fund established pursuant to the Resolution.

"Debt Service Reserve Requirement" shall have the meaning ascribed thereto in the Resolution.

"Engineer" shall have the meaning ascribed thereto in the Resolution.

"Financing Agreement" shall mean this Financing Agreement dated as of October 30, 1996 entered into pursuant to the Act by and between the Authority, the Board, and the City, acting for the City and the Utica Board of Water Supply, as the same may be from time to time hereafter amended or supplemented in accordance with the provisions of the Financing Agreement and of the Resolution.

"Fiscal Year" shall have the meaning ascribed thereto in the Resolution.

"Fund" shall mean any fund established pursuant to the Resolution.

"General Account" shall mean the Upper Mohawk Valley Regional Water Board General Account established within the Regional Water Fund by, and held in the custody of, the Board pursuant to Section 4.2(A)(2) of the Financing Agreement.

"Governing Board" shall have the meaning ascribed thereto in the Resolution.

"Indebtedness" shall have the meaning ascribed thereto in the Resolution.

"Promissory Note" shall have the meaning ascribed thereto in the Resolution.

"Promissory Note Fund" shall mean the Promissory Note Fund established pursuant to the Resolution.

"Promissory Note Requirement" shall have the meaning ascribed thereto in the Resolution.

"Purchase Agreement" shall have the meaning ascribed thereto in the Resolution.

"Rate Consultant" shall have the meaning ascribed thereto in the Resolution.

"Rebate Fund" shall mean the Rebate Fund established pursuant to the Resolution.

"Regional System" shall have the meaning ascribed in the Resolution.

"Regional Water Fund" shall mean the special fund by that name established by and in the custody of the Board.

"Repair and Improvement Fund" shall mean the Repair and Improvement Fund established pursuant to the Resolution.

"Repair Reserve Requirement" shall have the meaning ascribed thereto in the Resolution.

"Required Deposits" shall mean, for any Fiscal Year, amounts, if any, payable into the Debt Service Reserve Fund, the Repair and Improvement Fund, the Special Operating Fund (including amounts required to be transferred into the Rebate Fund) and any other Fund or Account established and for which deposits are required pursuant to the Resolution or a Supplemental Resolution, but only to the extent such payments are required to be made from Revenues pursuant to the Resolution.

"Resolution" shall mean the Water System General Revenue Bond Resolution to be adopted by the Authority prior to the issuance of the first issue of its Bonds, as the same may be amended or supplemented from time to time by one or more Supplemental Resolutions.

"Revenue Fund" shall mean the Revenue Fund established pursuant to the Resolution.

"Revenues" shall have the meaning ascribed thereto in the Resolution.

"Sale Agreement" shall mean that certain Sale Agreement, dated even date herewith, pursuant to which the City, acting for the City and the Utica Board of Water Supply, has sold, transferred and otherwise conveyed the City's and the Utica Board of Water Supply's title and interest in the System to the Board, which Sale Agreement is an integral part of this Financing Agreement and which, while prepared as an exhibit for simplicity of drafting and execution purposes, is incorporated in full into this Financing Agreement to the same extent and with the same force and effect as if it were a Section hereof, which Sale Agreement is attached hereto as Exhibit A.

"Series" or "Series of Bonds" shall mean all of the Bonds authenticated and delivered on original issuance and identified pursuant to the Supplemental Resolution authorizing such Bonds as a separate Series of Bonds and any Bonds thereafter authenticated and delivered in lieu of or in substitution therefor pursuant to the Resolution regardless of varieties in maturity, interest rate or other provisions.

"Special Operating Fund" shall have the meaning ascribed thereto in the Resolution.

"State" shall mean the State of New York.

"Subordinated Indebtedness" shall have the meaning ascribed thereto in the Resolution.

"Supplemental Resolution" shall have the meaning ascribed thereto in the Resolution.

"System" shall mean the Projects owned by the City or the Utica Board of Water Supply which constitutes a water supply, transmission and distribution system.

"Trust Estate" shall have the meaning ascribed thereto in the Resolution.

"Trustee" shall mean the bank or trust company appointed as Trustee pursuant to the Resolution, and its successor or successors and any other person which may at any time be substituted in its place pursuant to the Resolution.

"Utica Board of Water Supply" shall have the meaning ascribed thereto in the Resolution.

"Variable Rate Indebtedness" shall have the meaning ascribed thereto in the Resolution.

SECTION 1.2. INTERPRETATION. In this Financing Agreement, unless context otherwise requires:

(A) The terms "hereby", "hereof", "herein", "hereunder" and any similar terms as used in this Financing Agreement, refer to this Financing Agreement, and the term "heretofore" shall mean before, and the term "hereafter" shall mean after, the date of this Financing Agreement.

(B) Words of masculine gender shall mean and include correlative words of feminine and neuter genders.

(C) Words importing the singular number shall mean and include the plural number, and vice versa.

(D) Any certificates, letters or opinions required to be given pursuant to this Financing Agreement shall mean a signed document attesting to or acknowledging the circumstances, representations, opinions of law or other matters therein stated or set forth or setting forth matters to be determined pursuant to this Financing Agreement.

SECTION 1.3. AGREEMENT WITH BONDHOLDERS. Subject in all respects to the provisions of Article XI hereof, the Authority and the Board agree that this Financing Agreement is executed in part to induce the purchase of the Bonds, notes and other evidences of Indebtedness of the Authority (including the 1996A Bonds and the 1996B Bonds) issued from time to time, and all representations, warranties, covenants and agreements contained in this Financing Agreement are declared to be for the benefit of the holders thereof and of the Promissory Note.

## ARTICLE II.

### AGREEMENT AS TO REGIONAL SYSTEM AND REVENUES

SECTION 2.1. AGREEMENT TO FINANCE PROJECTS; DESCRIPTION. The Authority agrees to use its best efforts to finance all or a part of the Cost of the Projects described in Appendix A by the issuance of Bonds from time to time in accordance with the Resolution and to issue the Promissory Note to the City in accordance with the Sale Agreement. Appendix A may, from time to time, upon approval by resolution of the Authority and the Board, be amended to add a Project or to delete or change a Project listed thereon or to change the scope or Cost of a Project listed thereon, without the consent of the Trustee or the Bondholders. No proceeds of any obligations of the Authority shall be expended for any Project unless such shall be listed on Appendix A hereto. The financing by the Authority of the Cost of any Project added or changed by such amendment shall be governed by the terms and conditions of this Financing Agreement and the Resolution.

SECTION 2.2. NO INDEBTEDNESS OF BOARD. Nothing contained in this Financing Agreement, the Sale Agreement, any Purchase Agreement, the Resolution or any other document or instrument executed and delivered in connection with any of them, shall be construed as creating an indebtedness of the Board within the meaning of any constitutional or statutory provision.

SECTION 2.3. LEASE OF REGIONAL SYSTEM FROM BOARD TO AUTHORITY. In consideration of the promises and agreements of the Authority contained herein and in consideration of the issuance of the Bonds by the Authority to finance the Cost of the Projects described in Appendix A, the Board hereby leases all rights, title and interest of the Board in the Projects, including the System and, in the aggregate, the Regional System, described in Appendix A, including any Projects from time to time hereafter added to or amended on Appendix A, to the Authority upon the terms and conditions of this Financing Agreement.

SECTION 2.4. AGREEMENT OF AUTHORITY AND BOARD AS TO REGIONAL SYSTEM. The Authority hereby appoints the Board the exclusive operator of each Project, including the System and, in the aggregate, the Regional System, described on Appendix A. The Authority and the Board agree that the operation, maintenance and repair of any such Project shall be carried out

in accordance with the provisions of the Act and pursuant to the terms of this Financing Agreement.

SECTION 2.5. GRANT OF REVENUES TO AUTHORITY. In consideration of the promises and agreements of the Authority contained herein and in consideration of the issuance of the Bonds and the Promissory Note by the Authority to finance Costs of the Projects, including the System and, in the aggregate, the Regional System, described in Appendix A, the Board hereby pledges, gives, grants a security interest in, conveys and transfers to the Authority all of its right, title and interest in the Revenues, including, without limiting the generality of the foregoing, all of its rights to collect, receive and expend the same, subject only to (i) the full right of the Board during any and all periods other than those during which an "Event of Default", as defined in either Section 8.1 of this Financing Agreement or in Section 10.1(A) of the Resolution, shall have occurred and be continuing and in which the Trustee shall have demanded that the Board pay over or cause to be paid over to the Trustee all money and securities then held by the Board in the Regional Water Fund and all Accounts created thereunder, to act on its own behalf and retain Revenues for the purposes of paying Operating Expenses and (ii) to other provisions of this Financing Agreement and the Resolution permitting the application thereof for or to the purposes and on the terms and conditions herein and therein set forth.

ARTICLE III.

ARTICLE IV.

TRANSFER OF FUNDS

PAYMENTS BY THE BOARD

SECTION 3.1. APPLICATION OF BOND PROCEEDS TO PAY COSTS. The proceeds of the issuance of each Series of Bonds shall be deposited by the Authority with the Trustee and disbursed by the Trustee in accordance with the provisions of the Resolution and the applicable provisions of the Supplemental Resolution authorizing such Series of Bonds.

SECTION 3.2. PAYMENTS FROM CONSTRUCTION FUND. (A) The Costs incurred with respect to Projects shall be set forth in a certificate signed by an Authorized Representative of the Board and as provided in Section 4.2 of the Resolution.

(B) Moneys may be withdrawn from the Construction Fund for the purpose of paying an amount equal to any judgment arising out of claims against the Authority or the Board in any action, if the payment of such claims would constitute a Cost of a Project. Withdrawals may be similarly made with respect to the settlement of any such action.

SECTION 3.3. PAYMENTS FROM REGIONAL WATER FUND. As provided in Section 4.3 hereof, moneys in the Operation Account in the Regional Water Fund may be utilized to fund ongoing Projects undertaken by the Board.

SECTION 4.1. REGIONAL WATER FUND. All Revenues, as promptly as practicable after receipt thereof by the Board, shall be deposited by the Board into the General Account within the Regional Water Fund at the Bank. There shall also be deposited in the General Account within the Regional Water Fund all amounts received by the Board from the Trustee pursuant to the Resolution. All amounts in the Regional Water Fund shall be held in trust by the Board and applied only as provided herein, in the Act or in the Resolution.

SECTION 4.2. ESTABLISHMENT OF ACCOUNTS; APPLICATION OF REVENUES IN REGIONAL WATER FUND. (A) The Board shall establish the following special accounts or sub-funds within the Regional Water Fund:

(1) the "Upper Mohawk Valley Regional Water Board Operation Account" (the "Operation Account"); and

(2) the "Upper Mohawk Valley Regional Water Board General Account" (the "General Account");

each of which shall be held by the Board at the Bank in one or more accounts as the Board may determine.

(B) Such accounts shall be held by the Board as trust funds and the amounts on deposit therein shall be applied solely for the purposes provided herein and in any Sale Agreement or Purchase Agreement.

(C) Commencing on the first day of each calendar month succeeding the issuance of the 1996A Bonds and the 1996B Bonds, the Board shall make the following payments from the General Account within the Regional Water Fund in the following order of priority:

FIRST: an amount to the Operation Account as specified for the corresponding month for Operating Expenses in the Annual Budget. In the event that any unanticipated or emergency Operating Expenses occur in any month the Board may transfer amounts from the General Account sufficient to meet such unanticipated or emergency Operating Expenses. If sufficient moneys are not available in any month to make the required payment, the Board shall,

in the immediately following month, add the shortfall to the amount otherwise required to be paid for that month;

SECOND: from the balance, if any, in the General Account of the Regional Water Fund after making the deposit required by the preceding paragraph, to the Trustee, for deposit in the Revenue Fund for transfer to the Debt Service and Sinking Fund, such amount as is necessary so that the balance in the Debt Service and Sinking Fund equals Accrued Debt Service;

THIRD: from the balance, if any, in the General Account of the Regional Water Fund after making the deposits required by the preceding paragraphs, to the Trustee for deposit in the Revenue Fund for transfer to the Promissory Note Fund, such amount as is necessary so that the balance in the Promissory Note Fund equals the Accrued Promissory Note Payment;

FOURTH: from the balance, if any, in the General Account of the Regional Water Fund after making the deposits required by the preceding paragraphs, to the Trustee for deposit in the Revenue Fund for transfer to the Pilot Payments Fund, an amount as specified for the corresponding month for Pilot Payments in the Annual Budget. If sufficient moneys are not available in any month to make the required payment, the Board shall, in the immediately following month, add the shortfall to the amount otherwise required to be paid for that month;

FIFTH: from the balance, if any, in the General Account of the Regional Water Fund after making the deposits required by the preceding paragraphs, to the Trustee for deposit in the Revenue Fund for use by the Trustee in paying Authority Expenses, an amount as specified for the corresponding month for Authority Expenses in the Annual Budget. If sufficient moneys are not available in any month to make the required payment, the Board shall, in the immediately following month, add the shortfall to the amount otherwise required to be paid for that month;

SIXTH: from the balance, if any, in the General Account of the Regional Water Fund after making the deposits required by the preceding paragraphs, to the Trustee for deposit in the Revenue Fund for transfer to the Debt Service Reserve Fund, such amount as is necessary so

that the balance in the Debt Service Reserve Fund equals the Debt Service Reserve Requirement;

SEVENTH: from the balance, if any, in the General Account of the Regional Water Fund after making the deposits required by the preceding paragraphs, to the Trustee for deposit in the Revenue Fund for transfer to the Repair and Improvement Fund, an amount specified for the corresponding month for deposit to the Repair and Improvement Fund in the Annual Budget. If sufficient moneys are not available in any month to make the required payment, the Board shall, in the immediately following month, add the shortfall the amount otherwise required to be paid for that month;

EIGHTH: from the balance, if any, in the General Account in the Regional Water Fund after making the deposits required by the preceding paragraphs, such amount as is necessary to make all required payments for or in connection with Subordinated Indebtedness as provided in and in accordance with the provisions of the Resolution or any other resolution, trust indenture or similar document pertaining to such Subordinated Indebtedness.

NINTH: from the balance, if any, in the General Account of the Regional Water Fund after making the deposits required by the preceding paragraphs, to the Trustee, for deposit in the Revenue Fund for deposit by the Trustee in any Fund or account as the Authority or the Trustee at the direction of the Authority may from time to time create pursuant to Section 5.15 of the Resolution in such amount as is required by said direction.

TENTH: the balance at the end of each Fiscal Year, if any, in the General Account in the Regional Water Fund after making the deposits required by the preceding paragraphs, to the Trustee for deposit in the Revenue Fund for transfer to the Bond Redemption and Accumulated Surplus Fund.

(D) In making the payments required pursuant to paragraphs SECOND, THIRD, FOURTH, FIFTH, SIXTH and EIGHTH of subsection (C) of this Section, the Board shall be entitled to rely on the Certificate of an Authorized Representative of the Authority described in subsection (E) of this Section.

(E) On the day of issuance of the 1996A Bonds and the 1996B Bonds and on the first day of each Fiscal Year thereafter,

or more often if necessary or appropriate, the Authority, or the Trustee as the Authority's agent, shall deliver to the Board a certificate setting forth the Authority's calculations for that Fiscal year of (i) Accrued Debt Service with respect to each Series of Outstanding Bonds for each month of such Fiscal Year, (ii) the amounts required to be deposited each month in the Debt Service and Sinking Fund, (iii) the amount of the Accrued Promissory Note Payment for each month of such Fiscal Year, (iv) the amounts required to be deposited each month in the Promissory Note Fund, (v) the dates during each Fiscal Year in which a payment on the Promissory Note must be made, (vi) Authority Expenses and the proposed date of payment of each Authority Expense, (vii) the Debt Service Reserve Requirement, and (viii) payments for or in connection with Subordinated Indebtedness..

any other resolution, trust indenture or similar document) or this Financing Agreement shall be paid to the Board.

SECTION 4.3. OPERATION ACCOUNT. (A) The amounts on deposit in the Operation Account shall be applied to Operating Expenses.

(B) The amounts on deposit in the Operation Account may also be paid to any Municipality for costs incurred by such Municipality for operating and maintaining Projects approved by the Board as provided in a Purchase Agreement.

SECTION 4.4. APPLICATION OF REVENUES AFTER DEFAULT. Anything herein to the contrary notwithstanding, the Board covenants that, if an "Event of Default", as defined in Section 8.1 of this Financing Agreement or in Section 10.1(A) of the Resolution, shall occur and be continuing, the Board, upon demand of the Trustee, shall during the continuance of any such Event of Default pay over or cause to be paid over to the Trustee all moneys and securities then held by the Board in the Regional Water Fund and all Accounts created thereunder, and thereafter, as promptly as practical, the Revenues, for application in accordance with the provisions of the Resolution dealing with the application of moneys during the continuance of an Event of Default thereunder.

SECTION 4.5. AMOUNTS REMAINING. After all Bonds and all Subordinated Indebtedness have been paid in full or are no longer Outstanding pursuant to the provisions of the Resolution (or under any other resolution, trust indenture or similar document), and after payment of all other obligations and expenses of the Authority or provision for payment thereof has been made in accordance with the provisions of the Resolution (or under any other resolution, trust indenture or similar document), any amounts received or held by the Authority or the Trustee pursuant to the provisions of the Resolution (or under

ARTICLE V.

REPRESENTATIONS AND WARRANTIES;  
 CONSENT TO ASSIGNMENT; INDEMNIFICATION

SECTION 5.1. REPRESENTATIONS AND WARRANTIES. (A) The Board makes the following representations and warranties as the basis for the undertakings on its part herein contained:

(1) It is a body corporate and politic constituting a corporate municipal instrumentality duly organized and validly existing under the laws of the State, including the Act, and has full power and authority to (a) acquire and lease Projects, including the System and, in the aggregate, the Regional System, pursuant to the Act and to carry out its purposes in the manner proposed to be conducted pursuant to this Financing Agreement, the Sale Agreement and any Purchase Agreement to which it is or will become a party; and (b) execute, deliver and to perform and observe all of the terms and provisions proposed by this Financing Agreement, the Sale Agreement and any Purchase Agreement to which it is or will become a party.

(2) The execution, delivery and performance of this Financing Agreement and the Sale Agreement have been duly authorized by all necessary action on the part of the Board.

(3) All by-laws and rules and regulations adopted by the Board relating to the Board and the Regional System were duly adopted in conformity with the Act.

(B) The Authority makes the following representations and warranties as the basis for the undertakings on its part herein contained:

(1) It is a body corporate and politic constituting a public benefit corporation duly organized and validly existing under the laws of the State, including the Act, and has full power and authority to (a) acquire and lease Projects, including the System, and, in the aggregate, the Regional System, pursuant to the Act and to carry out its purposes in the manner proposed to be conducted pursuant to this Financing Agreement, the Sale Agreement and any Purchase Agreement to which it is or will become a party; (b) issue its Bonds pursuant to the Act and the Resolution and to carry out its purposes in the manner proposed to be

conducted pursuant to this Financing Agreement and the Resolution; and (c) execute, deliver and to perform and observe all of the terms and provisions proposed by this Financing Agreement, the Sale Agreement and any Purchase Agreement to which it is or will become a party.

(2) The execution, delivery and performance of this Financing Agreement has been duly authorized by all necessary action on the part of the Authority.

(3) All by-laws and resolutions adopted by the Authority relating to the Authority and the Bonds were duly adopted in conformity with the Act.

SECTION 5.2. CONSENT TO ASSIGNMENT. The lien on the Revenues created pursuant to the Act and Section 2.5 hereof is made for the benefit of the Authority and the Bondholders. The Board hereby consents to the assignment by the Authority to the Trustee for the benefit of the Bondholders of the benefits and rights of the Authority provided by this Financing Agreement, including, without limitation, the lien upon the Revenues created pursuant to the Act and Section 2.5 hereof and the pledge and agreement of the State included herein pursuant to Section 1226-q of the Act and set forth in Section 7.1 hereof, to the extent set forth in the Resolution.

## ARTICLE VI.

## COVENANTS

SECTION 6.1. RATE COVENANT. (A) The Board hereby covenants and agrees to establish, fix and revise, from time to time, fees, rates, rents or other charges for the use of, or services furnished, rendered or made available by the Regional System adequate, together with any other available funds, to provide for (1) the timely payment of the Accrued Debt Service on all Bonds and the principal of and interest on any other Indebtedness of the Authority payable from Revenues, (2) the proper operation and maintenance of the Regional System, (3) all other payments required for the Regional System not otherwise provided for and (4) all other payments required pursuant to the Financing Agreement, the Resolution, the Sale Agreement and any Purchase Agreement to which it is or will become a party.

(B) Without limiting the generality of subsection (A) above, the Board shall establish and collect rates, fees and charges sufficient in each Fiscal Year so that Revenues collected in such Fiscal Year will be at least equal to the sum of (1) one hundred fifteen percent (115%) of estimated Aggregate Debt Service and Projected Debt Service payable in such Fiscal Year, and (2) one hundred percent (100%) of the Operating Expenses, Accrued Promissory Note Payments, Pilot Payments, Authority Expenses and the amount necessary to pay any item which would constitute a Required Deposit, not specified above, each as is payable in such Fiscal Year. A failure to generate Revenues in accordance herewith shall not constitute an "event of default" within the meaning of Article VIII hereof, if the Board takes timely action to correct any such deficit under subsection (D) below.

(C) For purposes of the preceding Rate Covenant, Revenues shall include money of the Board or the Authority, except money transferred from the Construction Fund that is unexpended proceeds of Indebtedness, held in the Bond Redemption and Accumulated Surplus Fund which the Trustee has been irrevocably instructed to apply to the payment of Operating Expenses or Debt Service Requirements within the Fiscal Year for which credit is given.

(D) The Board shall review the adequacy of fees, rates and charges at least annually. If such annual review, or the report of the Rate Consultant pursuant to Section 6.2 hereof, indicates that the rates, fees and charges are, or will be, insufficient

(2) the Engineer's advice and recommendations as to improvements which should be made during the ensuing five Fiscal Years, and an estimate of the amounts of money necessary for such purposes;

(3) the Rate Consultant's advice and recommendations as to any necessary or advisable revisions of rates, fees and charges and such other advice and recommendation as it may deem desirable and, with respect to the Engineer's recommended five-year capital plan described in paragraph (2) above, the Rate Consultant's advice and recommendations showing the amount to be expended during each of such Fiscal Years from the proceeds of Bonds issued under the provisions of the Resolution (for purposes of the Rate Consultant's advice and recommendations with respect to the Engineer's recommended five-year capital plan pursuant to this Section 6.2 only, Revenues shall include amounts on deposit in the Bond Redemption and Accumulated Surplus Fund); and

(4) the Engineer's findings whether the Regional System has been maintained in good repair and sound operating condition, and its estimate of the amount, if any, required to be expended to place the Regional System in such condition and the details of such expenditures and the approximate time required therefor.

(C) The Board covenants that, if any such report shall set forth that the properties composing the Regional System have not been maintained in good repair and sound operating condition, the Board shall take all necessary action as will promptly restore such properties to good repair and sound operating condition with all expedition practicable.

(D) The Board further covenants that (1) the Engineer and the Rate Consultant shall at all times have free access to all properties of the Regional System and every part thereof and the records, maps, diagrams and other drawings thereof for the purposes of inspection and examination, and (2) their books, records and accounts may be examined by the Engineer and the Rate Consultant at all reasonable times.

SECTION 6.3. CONSTRUCTION, OPERATION AND MAINTENANCE. (A) The Board hereby covenants as follows:

(1) The Board shall at all times operate the Regional System properly and in a sound and economical manner and shall maintain, preserve, and keep the same preserved and kept with

to meet the requirements of this Section 6.1, the Board shall promptly take the necessary action to cure or avoid any such deficiency. The Board hereby agrees that it will diligently pursue the actions necessary to cure or avoid any such deficiency.

(E) Except (1) to the extent required by law, and (2) as otherwise provided herein, the Board will not furnish or supply or cause to be furnished or supplied any product, use or service of the Regional System, free of charge (or at a nominal charge) to any person, firm or corporation, public or private, and the Board will enforce the payment of any and all amounts owing to the Board for use of the Regional System in accordance with Section 6.7 hereof; provided, however, (i) there shall be no charge for use or services of the Regional System by the facility currently operated by the Utica Zoological Society and located on Steele Hill Road, Utica, which facility is commonly known as the Utica Zoo, and (ii) there may be no charges for any use or services of the Regional System by any Municipality in pursuance of its governmental functions or for services rendered to such Municipality in connection with such use of the Regional System.

SECTION 6.2. ENGINEER AND RATE CONSULTANT. (A) The Authority shall retain annually an Engineer for a term of one year and the Board shall retain annually a Rate Consultant for a term of one year whose duties, respectively, shall be to make any certificates and perform any other acts required or permitted of the Engineer and the Rate Consultant hereunder, under a Sale Agreement, a Purchase Agreement or under the Resolution. The same person or firm may not perform the duties and functions of the Engineer and the Rate Consultant.

(B) In every Fiscal Year, the Engineer and the Rate Consultant shall make an examination of, and shall report on, the properties and operations of the Regional System. Such reports shall be submitted to the Authority, the Board and the Trustee no later than ninety (90) days prior to the end of each Fiscal Year with respect to the Rate Consultant and one hundred twenty (120) days prior to the end of each Fiscal Year with respect to the Engineer and shall set forth the following:

(1) the Engineer's advice and recommendation as to the proper operation, maintenance and repair of the Regional System during the ensuing Fiscal Year, and an estimate of the amounts of money necessary for such purposes and the amounts required for the Repair and Improvement Fund;

the appurtenances and every part and parcel thereof, in good repair, working order and condition, and shall from time to time make, or cause to be made, all necessary and proper repairs, so that at all times the operation of the Regional System may be properly and advantageously conducted; provided, however, that nothing herein contained shall require the Board to operate, maintain, preserve, repair, replace, renew or reconstruct any part of the Regional System if there shall be filed with the Board, the Authority and the Trustee (1) a certificate of an Authorized Representative of the Board stating that in the opinion of the Board abandonment of operation of such part of the Regional System will not adversely affect the operation of the Regional System or the amount of Revenues derived therefrom and is not prejudicial to the interests of the Board, the Authority or the Bondholders and (2) a certificate of the Engineer concurring with such statement;

(2) The Board shall enforce the rules and regulations governing the operation, use and services of the Regional System established from time to time by the Board;

(3) The Board shall observe and perform all of the terms and conditions contained in the Act, and comply with all valid acts, rules, regulations, orders and directions of any legislative, executive, administrative or judicial body having competent jurisdiction of the Board or the Regional System; provided, however, that the failure of the Board to comply with the covenant contained in this subsection (C) for any period shall not constitute a default on its part so long as the Board, as the case may be (1) is taking reasonable and timely steps to permit compliance and (2) the Board shall have delivered to the Authority and to the Board a certificate of the Engineer which (a) sets forth in reasonable detail the facts and circumstances attendant to such noncompliance, (b) sets forth the steps being taken by the Board to permit compliance, (c) sets forth the estimated date on which the Board will be in compliance and (d) states that in the opinion of the Engineer such noncompliance during the period described will not adversely affect the operation of the Regional System or the amount of Revenues to be derived therefrom;

(4) Until the Bonds and all other Subordinated Indebtedness have been paid in full or provision has been made therefor in accordance with the Resolution (or such other resolution, trust indenture or similar document), the Board shall not create, and, to the extent it has the power to do so, shall not permit to be created, any lien upon or pledge of the Revenues, except (i) Permitted Encumbrances or (ii) Liens which

are expressly made subordinate to the lien of the Resolution. The Board may, however, from time to time, except as provided in, and subject to the terms and conditions of, the "Project Financing and Loan Agreement" between the Authority and "E.F.C." relating to the "Project" financed with the 1996B Bonds, as such quoted terms are defined in the Second Supplemental Resolution, sell or permit the sale of any machinery, fixtures, apparatus, tools, instruments, or movable property or any materials used in connection therewith which are no longer needed or useful in connection with the operation of the Regional System, provided that if the fair market value of such machinery, fixtures, apparatus, tools, instruments, or movable property or any materials used in connection therewith is reasonably expected to be in excess of \$500,000 an Engineer shall concur in writing with such declaration, and the proceeds thereof shall be applied to the replacement of the property so sold or disposed of or shall be transferred to the Authority and deposited, at the Authority's discretion, in the Bond Redemption Fund or the Repair and Improvement Fund. The Board may also from time to time sell or convey such real property as the Board by resolution shall declare to be no longer necessary or useful in connection with the operation of the Regional System, provided that (i) if any such real property declared to be no longer necessary or useful in connection with the operation of the Regional System was acquired from the City, except property identified at the time of transfer as being "southern reservoir property", such real property shall be conveyed, at no cost, to the City, (ii) if any such real property declared to be no longer necessary or useful in connection with the operation of the Regional System was acquired from the City and such real property was identified at the time of transfer as being "southern reservoir property", such real property shall be conveyed, at no cost, jointly to the City and the Town of New Hartford, and (iii) if any such real property declared to be no longer necessary or useful in connection with the operation of the Regional System is other than real property described in clauses (i) and (ii) hereof, and if the fair market value of such real property is reasonably expected to be in excess of \$500,000, an Engineer shall concur in writing with such declaration. The proceeds of any sale of real property shall be transferred to the Authority and deposited, at the Authority's discretion, in the Bond Redemption Fund or the Repair and Improvement Fund;

(5) prepare and at least annually review and, as appropriate, revise, a capital budget. Such capital budget shall be, at a minimum, a plan for the construction of new

and requirements lawfully made, of any national, state, legislative, executive, administrative or judicial body, commission or office, or other competent public authorities now or hereafter existing, exercising any power of regulation or supervision over the Authority or over the manner of the construction or operation thereof.

(B) The Authority hereby covenants, at the request of the Board, to use its best efforts to finance all or a part of the Costs of the Projects described in Appendix A by the issuance of Bonds from time to time in accordance with the Resolution.

SECTION 6.4. CONSTRUCTION CONTRACTS AND BONDS. The Board covenants that it will enter into, or accept by assignment, construction contracts with competent contractors for Projects the Construction of which is financed, or refinanced, with the proceeds of the 1996A Bonds, the 1996B Bonds or Additional Parity Indebtedness. The Board shall obtain from each contractor either a performance bond and a labor and material payment bond executed by a surety company qualified to do business in the State and having a rating of at least "A" by a nationally recognized rating agency or a letter of credit written upon a financial institution acceptable to the Board providing, respectively, that the contractor shall faithfully perform his or her contract and shall indemnify and save the Board harmless from expenses and damages, and that the contractor shall pay or cause to be paid all sums due for material furnished and labor supplied or performed in the prosecution of the work contemplated by his or her contract. The Board shall transfer to the Authority and the Authority shall deposit in the Construction Fund the net amounts recovered on such bonds or on any bonds or deposits delivered in connection with competitive bids of contractors or suppliers in connection with any project, if any. Notwithstanding the above, the Board may, in its discretion, waive the requirements for a performance bond, labor and material payment bond, or letter of credit, for construction contracts in an amount equal to or less than \$20,000.

SECTION 6.5. BUILDER'S RISK, LIABILITY AND WORKER'S COMPENSATION INSURANCE. The Board will maintain, or cause to be maintained, builder's risk (or equivalent coverage) insurance upon any work done or materials furnished under construction contracts except excavations, foundations and any other structures not customarily covered by such insurance, in accordance with the requirements of Section 9.2 hereof.

Projects and for the reconstruction and construction of additions to existing Projects or to the Regional System to be undertaken during the following five-year period. Such capital budget shall include the estimated Costs of all such construction or reconstruction and the proposed method of financing the same. If the proposed method of financing the Costs of any Project shall include the expenditures of current funds the Board shall raise such additional Revenues from such sources and at such times as the Board shall, in its sole discretion, determine necessary to provide such current funds for such Costs in a timely fashion in accordance with such capital budget. Current funds so raised shall not constitute an Operating Expense. Failure of the Board to raise such additional Revenues for such capital budget shall not constitute an Event of Default;

(6) to complete the acquisition and Construction, free of all liens and encumbrances, of all Projects financed, or refinanced, with the proceeds of the 1996A Bonds, the 1996B Bonds or Additional Parity Indebtedness with all due dispatch and efficiency; provided, however, that if the Authority makes a determination, evidenced by a resolution of the Governing Board of the Authority, that to complete any individual Project would not be in the best financial interests of the Authority, then the Authority shall discontinue the completion of said Project and the Trustee shall transfer any amounts remaining in the Construction Fund with respect to such discontinued Project (i) to a segregated account in the Bond Redemption Fund and apply such funds to the redemption of 1996A Bonds, the 1996B Bonds and Additional Parity Indebtedness issued to finance the Project in question or (ii) if there is delivered to the Trustee an opinion of Bond Counsel to the effect that the exclusion of interest on the 1996A Bonds, the 1996B Bonds or the Additional Parity Indebtedness will not be adversely affected, to the Repair and Improvement Fund for the purpose of financing of Costs of a Project. If the net capital loss to the Authority as a consequence of the decision to discontinue said Project, after taking into account the sale of unused materials and unexpended money in the Construction Fund, is reasonably expected to be in excess of \$1,000,000, the Authority shall obtain a certificate from an Engineer to the effect that the Board will be able to efficiently operate the Regional System without said Project; and

(7) in the construction of the Regional System and of each and all Projects by or under the control of the Board, it will comply with all laws, acts, rules, regulations, permits, orders

The Board will also maintain or cause to be maintained, worker's compensation insurance covering all employees of contractors and subcontractors in amounts required by law, and public liability insurance against bodily injury and property damage in amounts not less than those recommended by the Engineer, who need not be Independent, and Bond Counsel.

If all Bonds are secured by Credit Facilities issued concurrently with the delivery of each Series of Bonds and being security for each Series of Bonds, or any replacement thereof permitted in accordance with any Supplemental Resolution pursuant to which the applicable Bonds were issued and the Credit Facility Providers of all such Credit Facilities approve and no such Credit Facility Provider has wrongfully dishonored a draw request for payment under such Credit Facility, which wrongful dishonor remains uncured, the terms and provisions of this Section 6.5 may be varied by the Board, or need not be followed by the Board with the consent of the Authority but without the need for the approval of any or all Bondholders.

SECTION 6.6. ANNUAL BUDGET. (A) On January 1 of each year (or on such later date as the Authority and the Board may agree) the Authority shall deliver to the Board a certified copy of the Authority Budget for the ensuing Fiscal Year showing the Authority Expenses on a monthly basis, the Debt Service and Projected Debt Service and the Debt Service Reserve Requirement for all Series of Bonds and all Projected Series of Bonds for such Fiscal Year.

(B) Based upon the information contained in (1) the Authority Budget and (2) the reports of the Engineer and Rate Consultant described in Section 6.2 hereof (collectively, the "Budget Documents"), the Board shall prepare the Annual Budget for the ensuing Fiscal Year. In addition to the information contained in the Budget Documents, the Board shall also make provision in the Annual Budget (a) for Operating Expenses for the ensuing Fiscal Year, (b) for the amount, if any, required to be deposited in the Repair and Improvement Fund, and (c) for the amount, if any, required to be deposited in the Pilot Payments Fund. The Annual Budget of the Board shall provide for and itemize Operating Expenditures, Pilot Payments, deposits to the Repair and Improvement Fund and Authority Expenses on a monthly basis.

(C) Promptly after adoption of the Annual Budget, and in no event later than thirty days (or such other date as the Authority and the Board may agree) prior to the commencement of each Fiscal Year, the Board shall establish the rates, fees and

charges for the use of the Regional System for the ensuing Fiscal Year. The Board may from time to time, either before or after commencement of the Fiscal Year to which it relates, amend the Annual Budget. If, as of the first day of any Fiscal Year an Annual Budget has not been adopted, the Annual Budget for the immediately preceding Fiscal Year shall be the Annual Budget for such Fiscal Year until a new Annual Budget is adopted. The Annual Budget for Fiscal Years 1996/1997 and 1997/1998 adopted by the Board by resolution on or prior to the date of adoption of the Resolution shall be deemed to satisfy all the procedural requirements of this Section 6.6.

SECTION 6.7. COMPLIANCE WITH AGREEMENTS; TAX EXEMPTION.

(A) The Board hereby covenants with the Authority that it shall take all such actions or refrain from taking all such actions, as the case may be, so as to comply with the terms and provisions of the Sale Agreement, this Financing Agreement and any Purchase Agreements.

(B) The Authority hereby covenants with the Board that it shall take all such actions or refrain from taking all such actions, as the case may be, so as to comply with the terms and provisions of the Resolution and this Financing Agreement.

(C) The Authority further agrees that it will take no action to amend or supplement the Resolution in any way which would adversely affect the interest of the Board without the prior written consent to such amendment or supplement by those parties thereby affected.

(D) The Authority and the Board each hereby covenant one with the other that, so long as any Bonds shall be outstanding under the Resolution, each will (1) not take any action, or fail to take any action, which, if taken or not taken, as the case may be, would adversely affect the tax-exempt status of the interest payable on the Bonds then Outstanding and (2) consent to any amendments to the Financing Agreement, the Sale Agreement and any Purchase Agreement and the Resolution required, in the opinion of Bond Counsel, to maintain such tax exemption. Such amendments may be made without the consent of any Bondholders.

SECTION 6.8. COMPLIANCE WITH RESOLUTION. The Board shall take all such actions and refrain from taking all such actions, as the case may be, and otherwise shall operate the Regional System to ensure its compliance, and the compliance of the Authority, with the terms and provisions of the Resolution, or any other agreement approved by the Board entered into by the Authority in connection with the undertaking or financing of a

Project and which shall, by its terms, directly or indirectly apply to the Board.

SECTION 6.9. ENFORCEMENT OF RULES AND REGULATIONS. In accordance with Section 1226-i(4) of the Act, the Board shall enforce the rules and regulations providing for discontinuance of or disconnection from the supply of water for nonpayment of fees, rates, rents or other charges imposed by the Board, provided that such discontinuance or disconnection shall not be carried out except in the manner and upon the notice as is required of a waterworks corporation pursuant to Sections 89(b) (3) (a)-(c) and 116 of the Public Service Law of the State.

SECTION 6.10. BOOKS, RECORDS AND ACCOUNTS; AUDIT BY COMPTROLLER. (A) If the Authority so requests, the Board shall provide to the Authority such reports concerning the Regional System as may be required by the Authority.

(B) Each of the Authority and the Board shall keep, or cause to be kept, proper books of record and account in which complete and correct entries shall be made of all transactions relating to their corporate purposes under the Act. In accordance with Section 1226-w of the Act and Section 2800 of Title 1 of Article 9 of the Public Authorities Law of the State, the Authority and the Board shall each annually prepare a detailed report concerning their activities for the Fiscal Year which shall comply with the provisions of Section 1226-w of the Act and Section 2800 of Title 1 of Article 9 of the Public Authorities Law of the State and submit same to the Governor, the Chairs of the Senate Finance and Assembly Ways and Means Committees, the State Comptroller and the clerk of each Municipality, which report shall set forth: (1) their respective operations and accomplishments; (2) their respective receipts and disbursements, or revenues and expenses, during such Fiscal Year in accordance with the categories or classifications established by them for their own operating and capital outlay purposes; (3) their respective assets and liabilities at the end of their respective Fiscal Year including the status of reserve, depreciation, special or other funds and including the receipts and payments of these funds; and (4) a schedule of the Authority's bonds and notes outstanding at the end of its Fiscal Year, together with a statement of the amounts redeemed and incurred during such fiscal year. Such reports shall be submitted within one hundred twenty (120) days of the end of each Fiscal Year.

(C) The accounts of the Authority and the Board shall be subject to the supervision of the Comptroller, and he or his

legally authorized representatives are hereby authorized and empowered from time to time to examine the accounts and books of the Authority and the Board, including their respective receipts, disbursements, contracts, sinking funds, investments and any other matters relating to their respective financial standing and fiscal affairs.

SECTION 6.11. PAYMENT OF LAWFUL CHARGES; DISCHARGE OF LIENS. The Board covenants that it will pay or cause to be paid all taxes and assessments, if any, or other municipal or governmental charges lawfully levied or assessed upon the Regional System or upon any part thereof, or upon its Pledged Revenues, when the same shall become due, and will duly observe and comply with all valid requirements of any municipal or governmental authority relative to any such properties and will not create or suffer to be created any Lien or charge upon such properties or any part thereof or upon the revenue or other income therefrom, except the lien and charge of the Bonds secured hereby and Permitted Encumbrances, and that it will pay or cause to be discharged, or will make adequate provision to satisfy and discharge, within sixty (60) days after the same shall accrue, any such Lien or charge and also all lawful claims and demands for labor, materials, supplies or other items which, if unpaid, might by law become a lien upon such property or any party thereof or the revenue therefrom; provided, however, that nothing contained in this Section shall require the Board to pay or cause to be discharged, or make provision for, any such lien or charge, so long as the validity thereof shall be contested in good faith and by appropriate legal proceedings.

SECTION 6.12. SECURITY INTERESTS. Except to the extent provided by the Act, neither the Board nor the Authority may grant any Bondholder any security interest in any of the assets or properties of the Board (other than the Revenues which have been pledged pursuant to the terms hereof and of the Resolution).

SECTION 6.13. COMPLIANCE WITH LAW. The Authority and the Board hereby covenant and agree, each for itself, that it will observe and perform all of the terms and conditions contained in the Act, and comply with all valid laws, acts, rules, regulations, orders and directions of any legislative, executive, administrative or judicial body having competent jurisdiction over its property or affairs.

SECTION 6.14. FURTHER ASSURANCES. To the extent permitted by law, the Board from time to time shall make, do, execute, adopt, acknowledge and deliver and take all and every such

further acts, deeds, conveyances, assignments, resolutions, transfers and assurances as may be necessary or desirable for the better assuring, conveying, granting, assigning, confirming and effecting the rights assigned and the Revenues pledged hereby.

SECTION 6.15. PROCEDURE UPON COMPLETION OF PROJECT. The Board shall deliver to the Authority and the Trustee within a reasonable time after the earlier of the commencement of commercial operation of a Project or substantial completion of such Project, a Certificate of an Authorized Representative of completion approved by the Engineer stating the date of commencement of commercial operation or substantial completion of the Project and the sum, if any, to be retained in the relevant account of the Construction Fund for the payment of any unpaid Costs of the Project.

Upon delivery of such certificate to the Authority and the Trustee, any amount remaining in the relevant account of the Construction Fund and not reserved for the payment of Costs of a Project shall be transferred by the Trustee to the Bond Redemption and Accumulated Surplus Fund and applied to permitted purposes.

ARTICLE VII.

ARTICLE VIII.

AGREEMENT OF THE STATE

EVENTS OF DEFAULT AND REMEDIES

SECTION 7.1. AGREEMENT OF THE STATE. Pursuant to Section 1226-q of the Act, the State has pledged and agreed that it will not alter, limit or impair the rights hereby vested in the Authority to purchase, construct, own and operate, maintain, repair, improve, reconstruct, renovate, rehabilitate, enlarge, increase and extend, or dispose of any Project, or any part or parts thereof for which Bonds of the Authority shall have been issued, to establish and collect rates, rents, fees and other charges referred to in this title, to fulfill the terms of any contracts or agreements made with or for the benefit of the holders of Bonds or with any person or public corporation with reference to such Project or part thereof, or in any way to impair the rights and remedies of the holders of Bonds, until the Bonds, together with interest thereon, including interest on any unpaid installments of interest, and all costs and expenses in connection with any action or proceeding by or on behalf of the holders of Bonds, are fully met and discharged and such contracts are fully performed on the part of the Authority.

SECTION 8.1. EVENTS OF DEFAULT. An "event of default" or a "default" shall mean, whenever they are used in this Financing Agreement, any one or more of the following events:

(A) failure by the Board to make the payments required to be made pursuant to Section 4.2 of this Financing Agreement;

(B) failure of the Board to observe any covenant, term or condition of this Financing Agreement, other than as referred to in clause (A) of this Section, provided, however, that such failure shall have continued for a period of sixty (60) days after written notice, specifying such failure and requesting that it be remedied, is given to the Board by the Authority or the Trustee pursuant to the Resolution, unless the Authority or the Trustee, or both, as the case may be, shall agree in writing to an extension of such time prior to its expiration, and provided further, that if the failure stated in the notice cannot be remedied within the applicable period, neither the Authority nor the Trustee shall unreasonably withhold its or their consent to an extension of such time if corrective action has been instituted by the Board within such period and is being diligently pursued;

(C) the Board shall file a petition or otherwise seek relief under any federal or State bankruptcy or similar law; or

(D) the respective provisions of the Act pursuant to which the Resolution has been adopted or the Bonds have been issued, including, without limitation, those provisions pursuant to which the Lien upon the Revenues of the Board has been created pursuant to this Financing Agreement and the Resolution and those provisions establishing the powers and obligations of the Board and the relationship of the Authority to the Board as contemplated by the Act, shall be materially and adversely limited, altered or impaired by any legislative action or any final judgment or the terms, conditions and security provided under this Financing Agreement and the Resolution shall be materially and adversely limited, altered or impaired by any legislative action or any final judgment.

SECTION 8.2. REMEDIES. (A) Whenever any event of default shall have occurred and be continuing, and written notice of the default, if required, shall have been given to the Board by the

Authority or by the Trustee and the default shall not have been cured within any curative period provided therefor, the Authority and the Trustee may take whatever action at law or in equity may appear necessary or desirable to collect the payments then due and as they thereafter become due, and the Authority and the Trustee, so long as any Bonds are outstanding, may take whatever action at law or in equity may appear necessary or desirable to enforce performance and observance of any obligation, agreement or covenant of the Board under this Financing Agreement.

(B) In addition, if there is any default by the Board in the making of payments to the Trustee for the benefit of the Authority required under this Financing Agreement, as a result of the failure by the Board to impose sufficient fees, rates, rents or other charges, the Authority may, pursuant to subsection 6 of Section 1226-i of the Act, petition for the appointment by any court having jurisdiction in any proper action of a receiver to administer on behalf of the Board, under the direction of said court, the affairs of the Board in order to achieve Revenues at least sufficient to make such payments, and by and with the approval of said court, to establish, fix and revise, from time to time, fees, rates, rents or other charges at least sufficient therefor.

SECTION 8.3. REMEDIES NOT EXCLUSIVE. (A) The remedies conferred upon or reserved to the Authority and the Trustee in respect of any Event of Default are not intended to be exclusive of any other available remedy or remedies, but each and every such remedy shall be cumulative and shall be in addition to every other remedy given under this Financing Agreement or now or hereafter existing at law or in equity or by statute.

(B) No delay or omission to exercise any right or power accruing upon any Event of Default shall impair any such right or power or shall be construed to be a waiver thereof, but any such right and power may be exercised from time to time and as often as may be deemed expedient. In order to entitle the Authority to exercise any remedy reserved to it in this Article, it shall not be necessary to give any notice, other than such notice as may be expressly required herein.

ARTICLE IX.

INSURANCE

SECTION 9.1. PERMANENT INSURANCE. The Board covenants that so long as any of the Bonds shall remain Outstanding, it will insure or cause to be insured any at or above ground physical structures of the Regional System against loss or damage by fire and such other risks as are generally included in extended coverage insurance, excepting only during the periods and to the extent that the Board or contractors shall carry builders' risk or other insurance during construction. The policy or policies of such permanent insurance shall be issued by a responsible insurance company or companies authorized and qualified to do business under the laws of the State, in such reasonable amounts as are usually carried for like properties and as may be recommended by the Engineer or an Independent insurance consultant retained by the Board.

The Board covenants that it will file promptly with the Trustee either the policies and endorsements from time to time issued by the insurance company or companies, or proper memoranda of insurance, and as policies or endorsements are renewed from time to time the new policies or renewal endorsements, or memoranda thereof. The Authority will cause the Trustee to notify the Board if it becomes aware that said policies, endorsements, or other evidences of permanent insurance do not comply with the requirements of this Section 9.1. If the Board shall at any time fail to maintain the required permanent insurance upon lapse of builders' risk or other insurance carried during Construction, or upon lapse of any permanent insurance or otherwise, the Trustee may, but shall be under no duty to do so, contract for the required insurance and require the Authority to pay the insurance premiums.

SECTION 9.2. INSURANCE DURING CONSTRUCTION. The Board covenants to maintain or to require the contractors to maintain during the Construction of Projects, insurance against loss or damage by fire and lightning and other risks included in extended coverage, under separate insurance policies with builders' risk and extended coverage endorsements, issued by responsible insurance companies authorized and qualified to do business in the State. Such policies shall be issued in such reasonable amounts as are usually carried for like work and materials covered by the Construction contracts and as may be recommended by the Engineer or an Independent insurance consultant retained by the Board. The Board covenants to file



each such policy, or a proper memorandum of insurance, with the Trustee prior to submission of the first requisition for a payment for insurable work or materials to each contractor. If any such insurance shall expire prior to completion and the maintenance of permanent insurance under Section 9.1, the Board covenants to file with the Trustee a proper renewal endorsement or memorandum thereof. In the event that the proceeds of permanent insurance shall be applied as provided in subdivision (b) of Section 9.3 under Construction contracts without additional financing, the Board shall maintain, or cause contractors to maintain, insurance during Construction as above provided.

SECTION 9.3. DAMAGE OR DESTRUCTION OF THE REGIONAL SYSTEM; APPLICATION OF INSURANCE PROCEEDS. In the event that any of the buildings, structures, additions or improvements of the Regional System shall be wholly or partially destroyed by fire or other casualty covered by permanent insurance, the Board covenants and agrees to take all such actions and do all such things as may be necessary to enable recovery to be made upon the policy or policies of insurance covering the risk to the end that all proceeds of insurance may be expeditiously collected.

The proceeds of permanent insurance shall be applied, subject to the provisions of this Section 9.3, to the reconstruction, restoration, replacement or repair of the damaged or destroyed property, or to the acquisition or construction of Projects for the operation of the water system or to the redemption or purchase of Bonds as follows:

A. Deposit in Construction Fund. If the Board shall by resolution determine to apply all or part of said proceeds to the reconstruction, restoration or repair of the damaged property or to the Construction or acquisition of a Project, said proceeds or the portion thereof to be so applied shall be transferred to the Trustee for deposit in the Construction Fund and disbursed by the Trustee from time to time upon requisitions signed by an Authorized Representative of the Board, stating the amount to be paid and designating the payee and certifying that the payment is due and payable for the reconstruction, restoration, replacement or repair of the damaged or destroyed property or for the Construction or acquisition of a Project, and, if the Engineer is employed to supervise the work, upon submission of certificates of the Engineer in form satisfactory to the Trustee approving such payment; provided, however, that if the Board shall certify to the Authority and the Trustee that the amount to be so applied

SECTION 9.6. ALTERNATIVE INSURANCE. Notwithstanding the foregoing provisions of this Article, if at any time the Board shall be unable to obtain insurance required by this Agreement at a reasonable cost with reasonable terms and the Board shall determine that such insurance is not commercially available, it will not constitute an Event of Default under the provisions of this Agreement if the Board shall carry or cause to be carried such insurance through Qualified Self Insurance, provided that the requirements hereinafter set forth in this paragraph and the next two succeeding paragraphs are satisfied. "Qualified Self Insurance" means insurance maintained through a program of self insurance or, to the extent permitted by law, insurance maintained with an association in which the Board has a material interest or of which the Board has control, either singly or with others.

Prior to the participation in any plan of Qualified Self Insurance, the Board shall deliver to the Authority and the Trustee (i) a copy of the proposed plan, and (ii) a written report from an Independent insurance consultant containing an evaluation of the proposed plan together with an opinion to the effect that (A) the proposed Qualified Self Insurance will provide the coverage otherwise required by this Section, and (B) the proposed Qualified Self Insurance plan provides for the creation of actuarially sound reserves.

Each plan of Qualified Self Insurance shall be in written form, shall provide that upon the termination of such plan reserves will be established or insurance acquired in amounts adequate to cover any potential retained risk in respect of the period of self insurance, and shall be reviewed annually by an Independent insurance consultant or registered actuary who shall deliver to the Board a report on the adequacy of the reserves established thereunder in light of risks incurred. If the insurance consultant or registered actuary determines that such reserves are inadequate in light of the risks incurred, he shall make recommendations as to the amount of reserves that should be established and maintained, and the Board shall comply with such recommendations. A copy of each Qualified Self Insurance Plan and of each annual report thereon shall be delivered to the Trustee.

from said insurance proceeds is not more than \$1,000,000, then the Board may retain said insurance proceeds for application toward the reconstruction, restoration, replacement or repair of the damaged or destroyed property or toward the Construction or acquisition of a Project.

B. Deposit in Bond Redemption and Accumulated Surplus Fund. All proceeds of permanent insurance not applied as hereinabove authorized shall be transferred to the Trustee for deposit in the Bond Redemption and Accumulated Surplus Fund and applied by the Trustee to redeem or purchase Bonds in accordance with the Resolution.

Nothing in this Section 9.3 shall be construed to relieve the Board under this Financing Agreement from its obligation to maintain the Regional System in good repair, working order and condition, excepting only that to the extent that the proceeds of insurance shall be applied to the reconstruction, restoration, replacement or repair of damaged or destroyed property, or to the Construction or acquisition of a Project, or shall be applied to the purchase, redemption or defeasance of Bonds, then and to such extent the Board shall be relieved of such obligation with respect to the damaged or destroyed property.

SECTION 9.4. OTHER INSURANCE. The Board covenants that it will at all times cause its chief financial officer and all other officers and employees handling its funds to be bonded in adequate amounts by responsible bonding companies. The Board further covenants that so long as any of the Bonds are Outstanding it will maintain public liability, including bodily injury and property damage insurance, with responsible insurance companies in such amounts as may be recommended by an Engineer or an Independent insurance consultant retained by the Board.

SECTION 9.5. MISCELLANEOUS. All insurance policies shall be open to the inspection of the registered Owners of the Bonds and their representatives at all reasonable times. Any appraisal or adjustment of any loss or damage and any settlement or payment of indemnity therefor, which may be agreed upon between the Board and any insurer, shall be evidenced to the Trustee by a Certificate of an Authorized Officer. The Trustee may rely upon such certificate as conclusive, and shall in no way be liable or responsible for the collection of insurance money in case of any loss or damage. All such insurance policies shall be cancelable only on thirty (30) days prior notice to the extent reasonably practicable under then prevailing insurance industry standards.

## ARTICLE X.

## SALE AGREEMENT; PURCHASE AGREEMENTS

SECTION 10.1. SALE AGREEMENT. The Sale Agreement which is attached hereto as Exhibit A is hereby declared to be a part of this Financing Agreement and incorporated into this Financing Agreement in full at this point as though set forth in full herein.

SECTION 10.2. (A) PURCHASE AGREEMENTS. The Authority, the Board, and/or any Municipality may enter into a Purchase Agreement for the purpose of providing for the Construction or acquisition of a Project and the financing thereof, in accordance with the Act. Before entering into any such Purchase Agreement the Board shall review such facts, impacts and studies as the Board may, in its discretion, determine to cause to be presented and prepared.

(B) Any such Purchase Agreement: (i) shall describe in sufficient detail for reasonable identification the particular Project to be financed in whole or in part by the Authority, (ii) shall describe the plan for the financing of the Cost of the Construction of such Project, including the amount, if any, to be provided by the Board and the source or sources thereof, (iii) shall set forth the method by which and by whom and the terms and conditions upon which moneys provided by the Authority shall be disbursed, (iv) may require, in the discretion of the Authority, the payment to the Authority of the proceeds of any State and federal grants available to the Board, (v) shall provide for the establishment of user fees, rates and other charges and the charging and collection thereof by the Board for the use of, or services furnished, rendered or made available by such Project such as to provide that the Board receive Revenues at least sufficient, together with other Revenues of the Board, if any, to meet the requirements of the Act, (vi) may provide for the transfer by any Municipality to the Board pursuant to this title of ownership, or lesser interest, of any Project and leasing of any such Project to the Authority, (vii) may provide the Construction and completion of such Project by such Municipality or the Board and for the operation, maintenance and repair thereof, subject to such terms and conditions, not inconsistent with the Act, which may be in the public interest and necessary or desirable properly and adequately to secure the holders of Bonds of the Authority, (viii) shall provide for the discontinuance or disconnection of the supply of water for non-payment of fees, rates or other charges therefor imposed by the

Board, provided such discontinuance or disconnection of any supply of water shall not be carried out except in the manner and upon the notice as is required of a waterworks corporation pursuant to subdivisions three-a, three-b and three-c of section eighty-nine-b and section one hundred sixteen of the public service law, and (ix) in the discretion of the Authority, require reports concerning the Project from the Board to the Authority and the Municipality.

## ARTICLE XI.

AMENDMENTS TO THE FINANCING AGREEMENT,  
SALE AGREEMENT, ANY PURCHASE AGREEMENT; TERMINATION

SECTION 11.1. AMENDMENTS TO FINANCING AGREEMENT; CONSENTS. (A) No amendment hereto shall be effective unless it is in writing, signed by each of the parties hereto and, except for an amendment to Appendix A, consented to in writing by the Trustee.

(B) Except as hereinafter expressly provided, the parties hereto may enter into any amendment, change or modification of this Financing Agreement, including without limitation amendments to Appendix A (the list of approved Projects); provided, however, that except as provided in Section 11.2(B) hereof, the parties hereto shall not enter into, or consent to, any amendment, change or modification of the provisions of this Financing Agreement, without first obtaining the consent of the Bondholders in accordance with the provisions of the Resolution, if such amendment, modification or change would materially adversely affect the rights of the Bondholders by modifying or revoking the provisions of this Financing Agreement with respect to: (1) the grant of Revenues to the Authority; (2) the application of the proceeds of Bonds to pay the Costs of Projects; (3) the deposit or application of the Revenues in the Regional Water Fund; (4) the representations and warranties of the Board; (5) the consent to assignment by the Authority; (6) the covenants relating to the establishment and collection of rates and charges, appointment of the Engineer and the Rate Consultant, operation and maintenance, adoption of the Annual Budget, compliance with law, the Financing Agreement, and the Resolution, enforcement of rules and regulations, the obtaining of governmental approvals, maintenance of books, records and accounts, the creation of liens on or security interests in the Revenues or the Regional System and further assurances; (7) the agreement of the State; (8) Events of Default and remedies; (9) termination; (10) the controlling effect of the Resolution and the Bonds; (11) severability of invalid provisions; or (12) governing law.

SECTION 11.2. AMENDMENTS TO SALE AGREEMENT AND ANY PURCHASE AGREEMENT; CONSENTS. (A) The Authority and the Board hereby further covenant and agree that they will not enter into or consent to any amendment, change or modification of any Sale Agreement or Purchase Agreement without first obtaining the consent of the Bondholders in accordance with the provisions of the Resolution, if such amendment, modification or change would

materially adversely affect the rights of the Bondholders by modifying or revoking the provisions with respect to: (1) the right of the Board to restrict entry to or use of any Project; (2) the payments by the Board to any Municipality relating to operation and maintenance of any Project or Construction of improvements thereto; (3) the right of the Board to the Revenues; (4) compliance with applicable law, rules and regulations as to the use of any Projects; (5) billing and collection of rates and charges; (6) covenants as to the disposition of real and personal property constituting a portion of any Projects, encumbrances and further assurances; (7) termination; or (8) severability of invalid provisions.

(B) The Board and the Authority hereby agree to make amendments to this Financing Agreement, the Sale Agreement and any Purchase Agreement which are required by either rating agency to obtain or maintain a rating on the Bonds. Notwithstanding anything herein to the contrary, the consent of the Trustee or the Bondholders shall not be required for any such amendment.

SECTION 11.3. CONSENT OF TRUSTEE. In consenting to any amendment referred to in Section 11.1 and 11.2 hereof, the Trustee shall be fully protected in relying on an opinion of Bond Counsel, satisfactory to the Trustee, that such amendment is authorized or permitted by the terms of this Financing Agreement.

SECTION 11.4. TERMINATION. This Financing Agreement shall terminate, and the covenants and other obligations contained herein shall be discharged and satisfied, when (1) payment of all indebtedness of the Authority has been made or provided for in accordance with the Resolution (or such other resolution, trust indenture or similar document securing such indebtedness) and (2) either all payments required hereunder have been made in full, or provision for such payments satisfactory to the Authority has been made.

## ARTICLE XII.

## MISCELLANEOUS

SECTION 12.1. CONFLICTS. The provisions of this Financing Agreement are in no way intended to, nor shall such provisions, change or in any manner alter the terms of the Resolution, or adversely affect the security, rights or remedies of the Trustee or the Bondholders. In the event any provision of this Financing Agreement conflicts at any time, or in any manner, with the provisions of the Resolution or any Bond, the provisions of the Resolution or Bond shall be controlling and conflicting provisions of this Financing Agreement shall be disregarded.

SECTION 12.2. NO WAIVER. No failure to exercise, and no delay in exercising by the parties hereto, any right, power or privilege hereunder, shall operate as a waiver thereof; nor shall any single or partial exercise of any right, power or privilege hereunder preclude any other or further exercise thereof, or the exercise of any right, power or privilege. The rights and remedies herein provided are cumulative and not exclusive of any rights or remedies provided by law.

SECTION 12.3. NOTICES. (A) All notices, requests and other communications under this Financing Agreement shall be deemed to have been duly given if in writing when (1) delivered personally to the applicable address stated below, or (2) sent to the applicable address stated below by registered or certified mail, return receipt requested, or by such other means as shall provide the sender with documentary evidence of such delivery, or (3) delivery is refused by the addressee, as evidenced by the affidavit of the person who attempted to effect such delivery except as provided in subsection (B) hereof, the addresses to which such notices, requests and other communications hereunder shall be delivered are as follows:

IF TO THE BOARD:

Upper Mohawk Valley Regional Water Board  
One Kennedy Plaza  
Utica, New York 13502  
Attention: Chairman

with a copy to:

Office of the Secretary  
Upper Mohawk Valley Regional Water Board  
One Kennedy Plaza  
Utica, New York 13502

IF TO THE AUTHORITY:

Upper Mohawk Valley Regional  
Water Finance Authority  
One Kennedy Plaza  
Utica, New York 13502  
Attention: Chairman

with a copy to:

Office of the Secretary  
Upper Mohawk Valley Regional  
Water Finance Authority  
One Kennedy Plaza  
Utica, New York 13502

IF TO THE CITY:

Mayor  
City of Utica  
One Kennedy Plaza  
Utica, New York 13502

with a copy to:

Comptroller  
City of Utica  
One Kennedy Plaza  
Utica, New York 13502

(B) Each party entitled to receive notices hereunder may, by notice given hereunder, designate any further or different addresses to which subsequent notices, requests and other communication shall be sent.

SECTION 12.4. SEVERABILITY. In the event that any one or more of the provisions contained in this Financing Agreement is

or are invalid, irregular or unenforceable in any respect, the validity, regularity and enforceability of the remaining provisions contained in this Financing Agreement shall be in no way effected, prejudiced or disturbed thereby.

SECTION 12.5. HEADINGS. The descriptive headings of the several Articles and Sections of this Financing Agreement are inserted in this Financing Agreement for convenience only and shall not be deemed to affect the meaning or construction of any of the provisions hereof.

SECTION 12.6. GOVERNING LAW. This Financing Agreement shall be governed by, and construed in accordance with, the Constitution and laws of the State.

SECTION 12.7. PAYMENTS ON SATURDAYS, SUNDAYS AND HOLIDAYS. In any case where the date of any payment required to be made under this Financing Agreement shall be a Saturday or a Sunday or shall be, at the place designated for such payment a legal holiday or a day on which banking institutions in the City of New York are authorized by law to close, then such payment shall not be made on such date but shall be made on the next preceding business day not a Saturday, Sunday or a legal holiday or a day upon which banking institutions in the City of New York are authorized by law to close.

SECTION 12.8. COUNTERPARTS. This Financing Agreement, including the Sale Agreement, may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

SECTION 12.9. DATE OF FINANCING AGREEMENT. The date of this Financing Agreement shall be for identification purposes only. This Financing Agreement shall become effective upon the delivery of the initial issue of bonds, notes or other obligations of the Authority to the original purchasers thereof.

[SIGNATURE BLOCKS INTENTIONALLY OMITTED]

EXHIBIT B - PURCHASE AGREEMENT

[INTENTIONALLY OMITTED]

EXHIBIT A - SALE AGREEMENT

[INTENTIONALLY OMITTED]

APPENDIX A - PROJECTS  
[INTENTIONALLY OMITTED]

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**AMENDMENT TO FINANCING AGREEMENT**

THIS AMENDMENT TO FINANCING AGREEMENT, dated as of March 1, 2023 ("Amendment to Financing Agreement"), is by and between the UPPER MOHAWK VALLEY REGIONAL WATER FINANCE AUTHORITY, a body corporate and politic constituting a public benefit corporation of the State of New York and having its office at One Kennedy Plaza, Utica, New York 13501 (the "Authority"), and the UPPER MOHAWK VALLEY REGIONAL WATER BOARD, a body corporate and politic constituting a corporate municipal instrumentality of the State of New York (the "Board") and having its office at One Kennedy Plaza, Utica, New York 13501.

**RECITALS**

The Authority and the Board are parties to that certain Financing Agreement, dated as of October 30, 1996 (the "Original Financing Agreement"), by and among the Authority, the Board and the City of Utica, New York (the "City"), acting for the City and the Utica Board of Water Supply.

The Original Financing Agreement provides that the Authority will use its best efforts to finance all or a portion of the Cost of the 2023 Project described in Appendix A thereto by the issuance of Bonds from time to time in accordance with the Authority's Water System General Revenue Bond Resolution, dated as of December 1, 1996 (the "General Resolution" and as modified, amended or supplemented, the "Resolution"). Capitalized terms used and not otherwise defined herein shall have the meanings ascribed thereto in the Resolution.

The Board has requested that the Authority issue its Water System Revenue Bonds, Series 2023 (Green Bonds) (the "2023 Bonds") to finance a total of \$\_\_\_\_\_ in capital projects, which will include improvements, upgrades and repairs of treatment facilities, pumping stations, reservoirs, metering stations and other water facilities, site remediation, rehabilitation and upgrade to various storage tanks, preliminary engineering services, replacement or repair of transmission and distribution mains, as identified in the Fourteenth Supplemental Resolution dated as of March 1, 2023 (the "Fourteenth Supplemental Resolution").

In connection with the issuance of the 2023 Bonds pursuant to the General Resolution, as supplemented by the Fourteenth Supplemental Resolution, the Authority and the Board wish to amend the Original Financing Agreement to include the 2023 Project in Appendix A thereto.

**AGREEMENT**

For and in consideration of the premises and the mutual covenants hereinafter contained, the parties hereto do hereby mutually agree as follows:

1. Amendment. Appendix A to the Original Financing Agreement is hereby amended to include the 2023 Project, including without limitation the component projects identified on Schedule I hereto.
2. Effect. This Amendment to Financing Agreement shall be effective as of the date first above written. Except as amended hereby, the Original Financing Agreement shall continue

in full force and effect in accordance with the provisions thereof and the Original Financing Agreement is in all respects hereby ratified, confirmed and preserved. All references in the Original Financing Agreement to "the Financing Agreement" shall mean the Original Financing Agreement as amended by this Amendment to Financing Agreement.

3. Governing Law. The laws of the State of New York, without regard to its principles of conflicts of law, shall govern this Amendment to Financing Agreement.

4. Counterparts. This Amendment to Financing Agreement may be executed in counterparts with the same effect as if the signatures to each counterpart were upon a single instrument, and all such counterparts together shall be deemed an original of this Amendment to Financing Agreement.

[SIGNATURE PAGE AND SCHEDULE I INTENTIONALLY OMITTED]

**Audited Financial Statements for Fiscal Year  
Ending December 31, 2021**

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Combined Financial Statements

December 31, 2021 and 2020

# Mohawk Valley Water Authority

## Combined Financial Statements

December 31, 2021 and 2020

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## Independent Auditor's Report

Members of the Board  
Mohawk Valley Water Authority  
Utica, New York

### Report on the Audit of the Financial Statements

#### ***Opinion***

We have audited the combined financial statements of the Mohawk Valley Water Authority and the Upper Mohawk Valley Regional Water Finance Authority (collectively, the "Water Authority"), as of and for the year ended December 31, 2021 and 2020, and the related notes to the financial statements, which collectively comprise the Water Authority's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the Water Authority as of December 31, 2021 and 2020, and the changes in its financial position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

#### ***Basis for Opinion***

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards (Government Auditing Standards)*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Water Authority and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### ***Responsibilities of Management for the Financial Statements***

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Water Authority's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

### ***Auditor's Responsibilities for the Audit of the Financial Statements***

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Water Authority's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Water Authority's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

### ***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that management's discussion and analysis, the schedule of other postemployment benefits liability, the schedule of pension contributions and the schedule of the proportionate share of the net pension liability be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.



**Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued our reported dated March 29, 2022 on our consideration of the Water Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Water Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Water Authority's internal control over financial reporting and compliance.

BST+Co.CPAs, LLP

Albany, New York  
March 29, 2022



# Mohawk Valley Water Authority

## Management's Discussion and Analysis December 31, 2021 and 2020

This Management Discussion and Analysis (MD&A) of the Mohawk Valley Water Authority (hereafter referred as the Water Authority) provides an introduction to the major activities affecting the operations of the regional water system and an overview to the financial performance and statements of the Water Authority for the years ended December 31, 2021 and 2020. The information contained in the MD&A should be considered in conjunction with information contained in the combined financial statements of the Water Authority together with the notes thereto, which are essential to a full understanding of the data contained in the combined financial statements. In addition to the MD&A, the combined financial statements and accompanying notes, and certain required supplementary information is presented.

### WATER SYSTEM HIGHLIGHTS

- For the year ended December 31, 2021, the filtration plant treated 6.2 billion gallons of water to meet customer demands. This is a decrease of approximately 195 million gallons produced compared to the year ended December 31, 2020. Of the amount produced, customers consumed 3.3 billion gallons. This represents an increase of 48 million gallons compared to 2020 consumption.
- The average daily water production at the filtration plant was 16.9 million gallons for 2021. Daily water production during the year ranged from 14 million gallons per day to 20.1 million gallons per day at the water system's peak production for the year.
- The water service area comprises the City of Utica and several towns. Approximately 75% of the consumption comes from three municipalities, the City of Utica, 1.6 billion gallons (48%); the Town of New Hartford, 499 million gallons (15%); and the Town of Marcy, 401 million (12%).
- Unaccounted-for-water of approximately 37.5% is the result of an aging water system infrastructure. A continuous effort has been made to identify and correct leakage throughout the water system. For the past 8-10 years, a leak detection contractor has been retained to aid in an effort to reduce unaccounted-for-water. The specialty leak detection firm's objectives are to follow-up on previous leaks detected as well as identify any new leaks throughout the system.
- Revenue for the year ended December 31, 2021 increased to \$24.7 million, which is \$1.1 million higher than the prior year. Specifically, water sales increased \$542,000 to \$23.1 million dollars and delinquency charges increased \$586,000 to \$734,000 while other revenue sources contributed \$895,000 for the year.
- With an increase in annual water consumption and a moderate increase in water rates, metered water sales increased 2.4% overall for the year. In combination with the increase in water rates, monthly billed customer revenue increased \$397,000 with increased consumption and quarterly billed customer revenue increased \$145,000 with a decrease in consumption.
- Delinquency charges exceeded budget by \$160,000, primarily from penalties and unpaid bill fees imposed. During 2020, a state moratorium for charging customers delinquency fees was placed on water systems and other government entities, the result of an economic shutdown during the COVID-19 pandemic.
- Fees and ancillary charges exceeded budget by \$68,000. Most significant in this category of fees are backflow charges which exceeded budget by \$43,000.
- Operating expenses totaled \$17.5 million for 2021. Excluding depreciation and amortization, expenses were under budget by \$2.5 million. The favorable variances were in the areas of engineering, water distribution, maintenance and general services. A portion of this favorable variance is the result of capitalizing labor and benefits toward various capital projects managed during the year by the administration, finance, engineering and maintenance personnel.

# Mohawk Valley Water Authority

## Management's Discussion and Analysis December 31, 2021 and 2020

### WATER SYSTEM HIGHLIGHTS - CONTINUED

- Capital projects totaling \$2.8 million were completed and another \$4.6 million are in various stages of construction as part of an aggressive multi-year capital plan to remediate system deficiencies and provide enhanced transmission and distribution facilities.
- Major capital projects completed in 2021 include: tank repairs at the Welsh Bush Road tank in Utica, New York; water main replacement at the railroad crossing in Marcy New York; water main replacement on Shaw Street in Utica, New York; and large valve replacements throughout the water distribution system.
- Major capital projects currently in the construction stage include: the design, upgrade and implementation of a new supervisory control and data acquisition (SCADA) system software throughout the infrastructure of the water system; the bridge replacement at the southern reservoir and tank area; transmission mains along Cavanaugh road leading to a future water tank in the Town of Marcy; the construction of a 12 million gallon water tank on Snowden Hill Road in the Town of New Hartford; the beginning design and site preparation for the new pipe bridge at the water treatment plant; transmission mains on Oxford Road in New Hartford, NY erosion repairs at the Town of Trenton tank; a new generator at the Luke Road pump station in Marcy, NY and Hypochlorite upgrades at the water treatment plant.
- Continued disclosure of the Water Authority's strong financial condition noted by the November 2020 rating upgrade by Moody's Investor Services to Aa3 supports the Water Authority's successful efforts to maintain and improve the water system's financial resources.

### COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021

The Water Authority's combined financial statements are prepared on the accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) promulgated by the Governmental Accounting Standards Board (GASB). The Water Authority is a single-purpose entity, and revenues are recognized when earned, not received. Expenses are recognized when incurred, not when they are paid.

The combined financial statements are organized as follows:

The **Combined Statements of Net Position** present information on all of the Water Authority's assets, deferred outflows, liabilities, deferred inflows of resources and net position. Over time, increases or decreases in net position may serve as a useful indicator of the financial position of the Water Authority.

The **Combined Statements of Revenues, Expenses and Changes in Net Position** present information showing how the Water Authority's net position changed during the most recent reporting period. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will result in cash flows in prior or future periods (e.g., earned but unused vacation leave).

# Mohawk Valley Water Authority

## Management's Discussion and Analysis December 31, 2021 and 2020

### COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

The **Combined Statements of Cash Flows** present information depicting the Water Authority's cash flow activities for the reporting period and the effect that these activities had on the Water Authority's cash and cash equivalent balances.

The **Notes to the Combined Financial Statements** present additional information that is essential to a full understanding of the data provided in the combined financial statements. The notes to the combined financial statements can be found following the combined financial statements section of this report.

#### Combined Statements of Net Position

As of December 31, 2021, the Water Authority's net position increased \$3.8 million to a current amount of \$51.2 million. Consistent with prior years, the majority of the net position balance is invested in utility plant, net of related debt at \$45.2 million as of December 31, 2021. In addition, \$610,000 is restricted for the repair and improvement of the water infrastructure as stipulated under the original General Bond Resolution. Also, \$4 million is legally restricted for current portions of debt service. A balance of \$1.3 million is unrestricted.

The Board of Directors has designated \$922,000 to meet coverage requirements of future debt service; \$840,000 for repairs, replacement and renewal of system assets; \$1.4 million for operation and maintenance of water system assets; \$1.7 million for the annual maintenance and upkeep of infrastructure; and \$128,000 to fund specific board projects.

	<u>December 31, 2021</u>	<u>December 31, 2020</u>	<u>December 31, 2019</u>
<b>ASSETS</b>			
Current assets	\$ 41,000,262	\$ 45,171,924	\$ 30,179,340
Non-current assets	2,894,086	1,352,351	3,547,171
Net utility plant	<u>89,195,617</u>	<u>87,822,509</u>	<u>85,666,586</u>
Total assets	<u>133,089,965</u>	<u>134,346,784</u>	<u>119,393,097</u>
<b>DEFERRED OUTFLOWS OF RESOURCES</b>	<u>6,240,854</u>	<u>5,596,226</u>	<u>3,610,149</u>
<b>LIABILITIES</b>			
Current liabilities	8,990,950	8,800,369	8,632,051
Bonds and notes payable, less current installments	61,934,656	65,603,361	51,379,936
Other liabilities	<u>12,603,464</u>	<u>16,852,329</u>	<u>16,050,713</u>
Total liabilities	<u>83,529,070</u>	<u>91,256,059</u>	<u>76,062,700</u>
<b>DEFERRED INFLOWS OF RESOURCES</b>	<u>4,611,354</u>	<u>1,301,238</u>	<u>844,248</u>
<b>NET POSITION</b>			
Net investment in capital assets	45,245,621	42,444,513	42,397,714
Restricted for debt service and repairs and improvement	4,601,753	4,863,765	3,623,291
Unrestricted	<u>1,343,021</u>	<u>77,435</u>	<u>75,293</u>
Total net position	<u>\$ 51,190,395</u>	<u>\$ 47,385,713</u>	<u>\$ 46,096,298</u>

# Mohawk Valley Water Authority

## Management's Discussion and Analysis December 31, 2021 and 2020

### COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

#### Combined Statements of Net Position - Continued

##### Assets

- For the year ended December 31, 2021, total assets decreased by \$1.3 million compared to December 31, 2020 and increased \$13.7 million compared to December 31, 2019. Major assets included in the total asset's category consist of utility plant, cash, and investments. Investment balances decreased \$1.7 million compared to 2020 and increased \$8.3 million compared to 2019. Water receivable balances increased \$285,000 compared to 2020 and \$570,000 compared to 2019. Additionally, cash and cash equivalents decreased \$932,000 compared to 2020 and increased \$1.5 million compared to 2019.
- Utility plant consists of land, equipment, treatment and storage facilities and distribution lines. This utility plant is recorded at cost less related accumulated depreciation. In addition, there are numerous capital projects making up the balance of construction work-in-progress. As of December 31, 2021, 2020 and 2019, utility plant, net of depreciation, was \$89.2 million, \$87.8 million and \$85.7 million, respectively.
- Current assets represent unrestricted, Board designated and restricted cash and investments, receivables, inventory, and prepaid expenses. Current assets were approximately \$41 million, \$45.2 million and \$30.2 million as of December 31, 2021, 2020 and 2019, respectively. Cash balances were \$13.9 million, \$14.8 million and \$12.4 million, respectively. Unrestricted cash decreased \$893,000 as a nominal water rate increase was offset by increased debt service payments. Restricted current cash increased \$663,000 to \$4.1 million, with increases in cash reserves and sewer collections, offset by drawdowns to pay continued capital project investment in the water system. Restricted current investments decreased to \$19.7 million as investments matured during the year.
- Water receivables, net, increased to \$2.9 million. This includes an allowance for doubtful accounts of \$478,000, which increased \$74,000 compared to the prior year and \$93,000 compared to the 2019 allowance.
- Inventory decreased by \$136,000 to \$807,000, primarily due to installation of extra hydrants in stock from the previous year due to the COVID-19 shutdown. Additionally, piping and meter inventories were reduced as large projects were completed. Inventory is typically purchased and used during the current year.
- Noncurrent assets represent investments from bond proceeds held by a trustee related to various revenue bond issues. A portion of these noncurrent assets consist of Board commitments designated to fund future repairs and maintenance of the infrastructure. However, the larger portion of these investments is subject to external restrictions as stipulated under applicable bond resolutions. As of December 31, 2021, 2020 and 2019, noncurrent assets were \$2.9 million, \$1.4 million and \$3.5 million, respectively. The increase in 2021 resulted from investment of funds in reserve for bonds issued late in 2020.
- Deferred outflows of resources consist of deferred amounts from bond refunding's, bond insurance premiums, and future obligations for pension and for postemployment benefits other than pension. As of December 31, 2021, the balance consists of deferred amounts from bond refunding's of \$2 million, unamortized bond insurance premiums of \$116,000, and resources for pension and postemployment benefits other than pensions of \$4.1 million. Deferred amounts for bonds are amortized over the life of bonds and will reduce over time.

# Mohawk Valley Water Authority

Management's Discussion and Analysis  
December 31, 2021 and 2020

## COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

### Combined Statements of Net Position - Continued

#### Assets - Continued

	<u>December 31, 2021</u>	<u>December 31, 2020</u>	<u>December 31, 2019</u>
Water rights and other intangible assets	\$ 1,050,000	\$ 1,050,000	\$ 1,050,000
Construction work-in-process	9,804,340	8,004,107	4,120,399
Land	<u>981,806</u>	<u>981,806</u>	<u>981,806</u>
Utility plant, not being depreciated	11,836,146	10,035,913	6,152,205
Water transmission and storage	38,469,336	37,724,831	37,555,587
Water treatment facilities	24,109,765	24,073,043	24,073,043
Distribution	43,660,755	42,748,157	42,373,161
Office and lab equipment	3,243,850	3,194,900	3,085,237
Vehicles and maintenance equipment	<u>4,852,251</u>	<u>4,623,517</u>	<u>4,318,750</u>
	114,335,957	112,364,448	111,405,778
Less accumulated depreciation	<u>(36,976,486)</u>	<u>(34,577,852)</u>	<u>(31,891,397)</u>
Utility plant, net of depreciation	<u>77,359,471</u>	<u>77,786,596</u>	<u>79,514,381</u>
Net utility plant, at cost	<u>\$ 89,195,617</u>	<u>\$ 87,822,509</u>	<u>\$ 85,666,586</u>

Work-in-process includes major construction projects and repairs to existing infrastructure not completed as of year-end. When the projects are completed, these projects are closed and capitalized as an asset into one of the major asset categories listed above.

Capital construction additions for the year ended December 31, 2021 amounted to \$4.6 million compared to \$5.4 million from the previous year. Construction projects currently underway in the amount of \$9.8 million will be completed over the next several years. These projects consist primarily of water tanks, water main repairs and replacements, and other infrastructure repairs. When complete, these repairs and improvements will increase water capacity and efficiency, eliminate some lingering system deficiencies, and comply with regulatory mandates. During 2021, \$2.8 million of work-in-progress projects were completed.



# Mohawk Valley Water Authority

Management's Discussion and Analysis  
December 31, 2021 and 2020

## COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

### Combined Statements of Net Position - Continued

#### *Assets - Continued*

Ongoing capital projects currently in work-in-progress include:

- The design, upgrade and implementation of a new supervisory control and data acquisition (SCADA) system software throughout the infrastructure of the water system at a current cost of \$2.1 Million;
- The construction of a 12 million gallon water tank on Snowden Hill Road in the Town of New Hartford at a current cost of \$2.7 million;
- Continued water line improvements under the Erie Canal near Marcy at a current cost of \$1.1 million.
- New transmission mains along Cavanaugh Road leading to a future water tank in the Town of Marcy at a current cost of \$962,000;
- The beginning design and site preparation for the new pipe bridge at the water treatment plant at a current cost of \$421,000; and
- Main replacements along Route 5S as part of the New York State DOT's road improvements in downtown Utica at a current cost of \$524,000.

Additional information on the Water Authority's utility plant can be found in the Utility Plant and Depreciation note in the notes to the combined financial statements section of this report.

#### *Liabilities*

- Current liabilities consist of accrued payments to suppliers and construction contractors, amounts owed to municipalities for collection services, and the current portions payable for accrued interest and principal on outstanding debt. The Water Authority has current ratios of 4.56, 5.13 and 3.50 as of December 31, 2021, 2020 and 2019, respectively.

	December 31, 2021	December 31, 2020	December 31, 2019
Current Assets	\$ 41,000,262	\$ 45,171,924	\$ 30,179,340
Current Liabilities	8,990,950	8,800,369	8,632,051
Current Ratio	4.56	5.13	3.50

# Mohawk Valley Water Authority

Management's Discussion and Analysis  
December 31, 2021 and 2020

## COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

### Combined Statements of Net Position - Continued

#### *Liabilities - Continued*

- Long-term obligations consist of water revenue bonds and capital appreciation bonds acquired to finance the water system's multi-year capital improvement plan, and a promissory note owed to the City of Utica as part of the purchase of the water system from the City in 1996. In addition, other liabilities include a net pension liability through the New York Retirement System, actuarially determined postemployment health benefits owed to retirees, and compensated absences (vacation and sick benefits) owed to employees.
- Deferred inflows of resources include pension and postemployment benefits other than pension and consist of amounts remaining when comparing actual to expected amounts of actuarial determined pension liabilities.

#### *Water Revenue Bonds and Capital Appreciation Bonds*

As of December 31, 2021, the Water Authority has six water revenue bond series outstanding totaling \$53.2 million and one capital appreciation bond series outstanding totaling \$3.9 million.

The outstanding revenue and capital appreciation bond issues include: 2001B series bonds issued for \$2.8 million with an outstanding principal balance of \$470,000; 2012 series bonds issued for \$15.6 million (\$8.8 million to fund capital projects and \$6.8 million to refund the remaining 2003 series revenue bonds) with an outstanding principal balance of \$750,000; 2015 series bonds issued for \$24.45 million (\$4.08 to fund various capital projects and \$20.37 million advance refunding portions of the 2006A and 2008A bonds) with an outstanding principal balance of \$19.2 million; 2016 series bonds issued for \$8.77 million (\$4.50 million to fund capital projects and, as noted above, \$4.27 million to refund the remaining 2006 series revenue bonds) with an outstanding principal balance of \$7.1 million; 2020A series bonds issued for \$14.9 million issued to fund various capital projects and 2020B series bonds issued for \$11 million to refund portion of 2012 bonds, with outstanding principal balances of \$14.9 million and \$10.8 million, respectively.

The 2001A and 2001B series bonds were funded through the New York State Drinking Water Revolving Fund administered by the Environmental Facilities Corporation (EFC), a public benefit corporation of the State of New York. The 2001A series bonds are the result of an advanced refunding of the original 1996A Series bonds used to purchase the water system from the City of Utica in 1996. During 2011 and 2012, EFC refinanced state-backed bonds related to the series 2001A and 2001B bond issues. Savings from these refinanced bond issues are currently passed on to the Water Authority as subsidies over the life of the two bond issues.

# Mohawk Valley Water Authority

Management's Discussion and Analysis  
December 31, 2021 and 2020

## COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

### Combined Statements of Net Position - Continued

#### *Water Revenue Bonds and Capital Appreciation Bonds - Continued*

Principal balances on water revenue bonds and capital appreciation bonds outstanding as of December 31, 2021, 2020 and 2019 are as follows:

Year of Issue	December 31,		
	2021	2020	2019
2000	\$ 3,885,794	\$ 4,513,820	\$ 4,513,820
2001A	-	-	1,810,000
2001B	470,000	640,000	805,000
2012	750,000	1,470,000	12,395,000
2015	19,215,000	20,535,000	21,780,000
2016	7,090,000	7,345,000	7,725,000
2020A	14,920,000	14,920,000	-
2020B	10,810,000	10,955,000	-
	<u>\$ 57,140,794</u>	<u>\$ 60,378,820</u>	<u>\$ 49,028,820</u>

Additional information on the Water Authority's long-term debt is found in the Long-Term Liabilities note in the notes to combined financial statements section of this report.

#### *Credit Ratings*

The Water Authority is currently the recipient of favorable credit ratings from both Moody's Investors Service and Standard and Poor's Ratings Services.

In October 2020, Moody's Investors Service performed a credit analysis of the operations of the Water Authority as part of the bonding process for issuing the 2020A and 2020B series bonds. As a result, Moody's upgraded the Water Authority to Aa3 from A1. In Moody's report, it stated the Water Authority "benefits from a strong financial position marked by conservative budgeting" and "benefits from sufficient debt service coverage."

Standard and Poor's Rating Services also performed a credit analysis on the operations of the Water Authority for the 2020A and 2020B series bonds maintaining an underlying rating of A+. The 2020A and 2020B bonds obtained bond insurance raising the market rating for S&P rating Service to AA. The rating statement assigned to the Water Authority's indicated the "combination of strong enterprise and financial risk profiles," with "good operational management practices and policies, good coverage levels of all-in debt service requirements and good overall liquidity."

Periodic and continued disclosure of the Water Authority's strong financial condition to rating agencies and other stakeholders has supported the favorable credit ratings.

# Mohawk Valley Water Authority

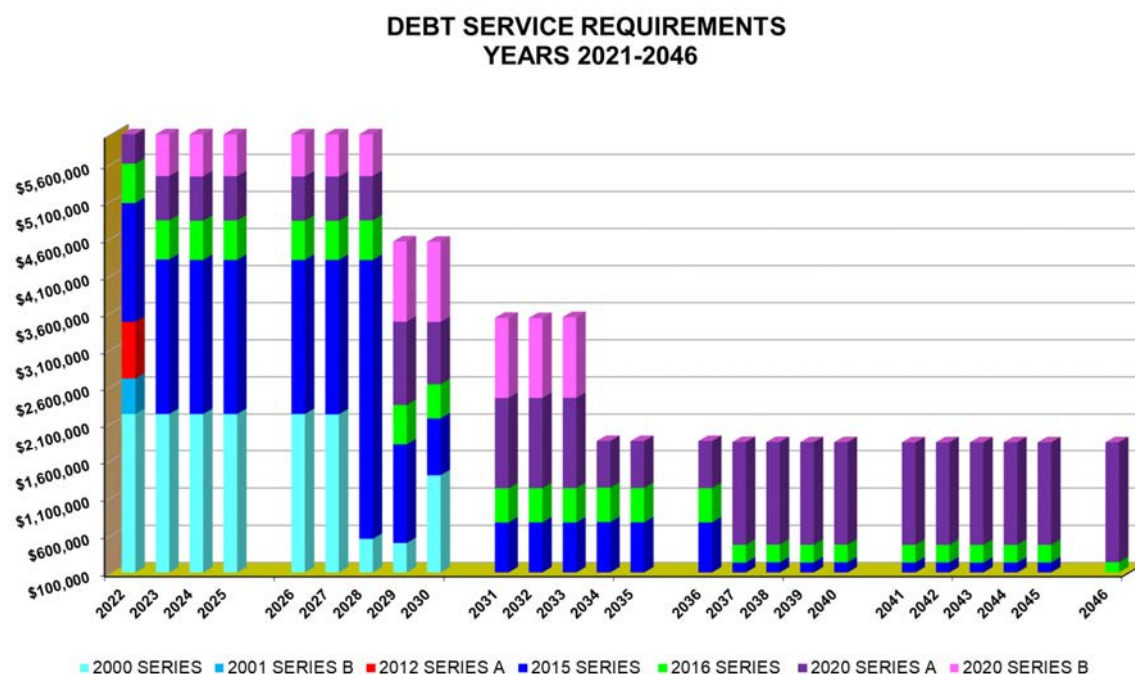
Management's Discussion and Analysis  
December 31, 2021 and 2020

## COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

### Combined Statements of Net Position - Continued

#### *Credit Ratings - Continued*

Annual debt service is the amount of cash that is required each year to cover the repayment of principal and interest on debt. The Water Authority's requirement by each bond series (excluding the Promissory Note) is as follows:



#### *Net Position*

The Water Authority's net position as of December 31, 2021, 2020 and 2019 was \$51.2, \$47.4 and \$46.1 million, respectively. Net position is divided into three categories: net investment in capital assets, restricted, and unrestricted net position.

- Net investment in capital assets consists of the Water Authority's utility plant less related debt excluding unspent debt proceeds on the outstanding debt. The balance for this category was \$45.2 million, \$42.5 million and \$42.4 million as of December 31, 2021, 2020 and 2019, respectively. The unspent debt proceeds offsetting net investment in capital assets consist of construction fund amounts of \$15 million and bond reserve funds of \$4.7 million as of December 31, 2021.
- Restricted net position represents assets where constraints externally imposed or imposed by law are placed on the assets. The largest portion of restricted assets is amounts funded to a trustee for the retirement of debt. As of December 31, 2021, 2020 and 2019, amounts restricted for debt service were \$4.0, \$4.2 and \$3.0 million, respectively. Also, as of December 31, 2021, 2020 and 2019, \$610,000, \$611,000 and \$604,000 have been restricted by legislation for the repair and improvement of the water system.

# Mohawk Valley Water Authority

Management's Discussion and Analysis  
December 31, 2021 and 2020

## COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

### Combined Statements of Net Position - Continued

#### *Net Position - Continued*

- Unrestricted net position represents residual amounts at the end of each year that do not meet the definition of restricted or net investment in capital assets. The Board of Directors has segregated portions of unrestricted net position to indicate tentative plans for future financial commitments and resource use. The strategy is to annually fund these programs to meet budgetary commitments. Approximately \$5.1 million has been designated by the Board of Directors for specific programs. The following reserves have been designated by the Board to fund future efforts:
  - Water rates and fees are required by covenant to be set at 115% of the estimated aggregate debt service for each year plus all remaining obligations including operating expenses, PILOT payments, Finance Authority obligations, promissory notes and debt service. To that end, the Water Authority has set aside additional funds equivalent to 15% of estimated aggregate debt service. As of December 31, 2021, the set aside amount is \$922,000.
  - A capital maintenance reserve used to fund the annual maintenance of larger infrastructure assets in the water system has a current balance of \$1.7 million. Amounts are anticipated to be funded each year with the goal of annually paying for the maintenance of these assets as opposed to bonding for the repairs over time.
  - Other reserves include \$840,000 for the repair, renewal and replacement of utility assets and \$1.4 million as a reserve for operation and maintenance as part of a Cost of Service Rate Study; and \$128,000 designated for future Board of Directors' projects.

### Combined Changes in Revenue, Expenses, and Changes in Net Position

For the year ended December 31, 2021, operating revenues totaled \$24.7 million, an increase of \$1.1 million from the prior year and \$673,000 compared to 2019. When comparing the 2021 actual to budget, operating revenues were higher by \$373,000.

Operating expenses incurred for producing revenue totaled \$17.5 million, a decrease of \$952,000 compared to the prior year and an increase of \$300,000 compared to 2019. Compared to the 2021 budget, before amortization and depreciation, operating expenses are less by \$2.5 million.

Net operating income is \$7.2 million for the year ended December 31, 2021, up \$2 million compared to the prior year and \$373,000 compared to 2019.

Non-operating revenue and expense are activities that are not considered directly related to the production of operating income. This net expense category decreased \$485,000 compared to the prior year and increased \$72,000 compared to 2019.

The Water Authority's net position increased \$3.8 million for the year ended December 31, 2021 compared to \$1.3 million for 2020 and \$3.5 million for 2019.

# Mohawk Valley Water Authority

Management's Discussion and Analysis  
December 31, 2021 and 2020

## COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

### Combined Changes in Revenue, Expenses, and Changes in Net Position - Continued

	Year Ended December 31, 2021	Year Ended December 31, 2020	Year Ended December 31, 2019
Operating revenues	\$ 24,721,732	\$ 23,643,942	\$ 24,048,979
Operating expenses	<u>(17,524,154)</u>	<u>(18,476,617)</u>	<u>(17,224,516)</u>
Operating income	7,197,578	5,167,325	6,824,463
Non-operating revenues (expenses)			
Investment income	122,812	260,247	419,814
Interest expense	(2,811,678)	(2,820,411)	(2,849,168)
PILOT payments	(1,204,078)	(1,233,220)	(1,275,610)
Other	<u>500,048</u>	<u>(84,526)</u>	<u>383,997</u>
Total non-operating revenues (expenses)	<u>(3,392,896)</u>	<u>(3,877,910)</u>	<u>(3,320,967)</u>
Change in net position	3,804,682	1,289,415	3,503,496
Net position, beginning of year	<u>47,385,713</u>	<u>46,096,298</u>	<u>42,592,802</u>
Net position, end of year	<u>\$ 51,190,395</u>	<u>\$ 47,385,713</u>	<u>\$ 46,096,298</u>

### *Water Rates*

The Water Authority sets its rates annually in concurrence with the adoption of its annual operating and capital budget. Enabling legislation dictates that rates and fees are set sufficient to cover all operating costs and 115% of the principal and interest on debt service used for construction and remediation of the existing system. The following is a history of water rate changes:

#### EFFECTIVE DATE RATE HISTORY

Date	Rate Increase		Date	Rate Increase		Date	Rate Increase
4/1/2001	5.40%		4/1/2008	7.10%		1/1/2015	2.80%
4/1/2002	6.00%		4/1/2009	5.60%		1/1/2016	2.00%
4/1/2003	9.50%		4/1/2010	7.90%		1/1/2017	1.50%
4/1/2004	5.00%		4/1/2011	2.00%		1/1/2018	3.77%
4/1/2005	8.74%		4/1/2012	2.00%		1/1/2019	2.00%
4/1/2006	13.50%		4/1/2013	1.90%		1/1/2020	2.50%
4/1/2007	8.30%		4/1/2014	2.90%		1/1/2021	2.00%

# Mohawk Valley Water Authority

Management's Discussion and Analysis  
December 31, 2021 and 2020

## COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

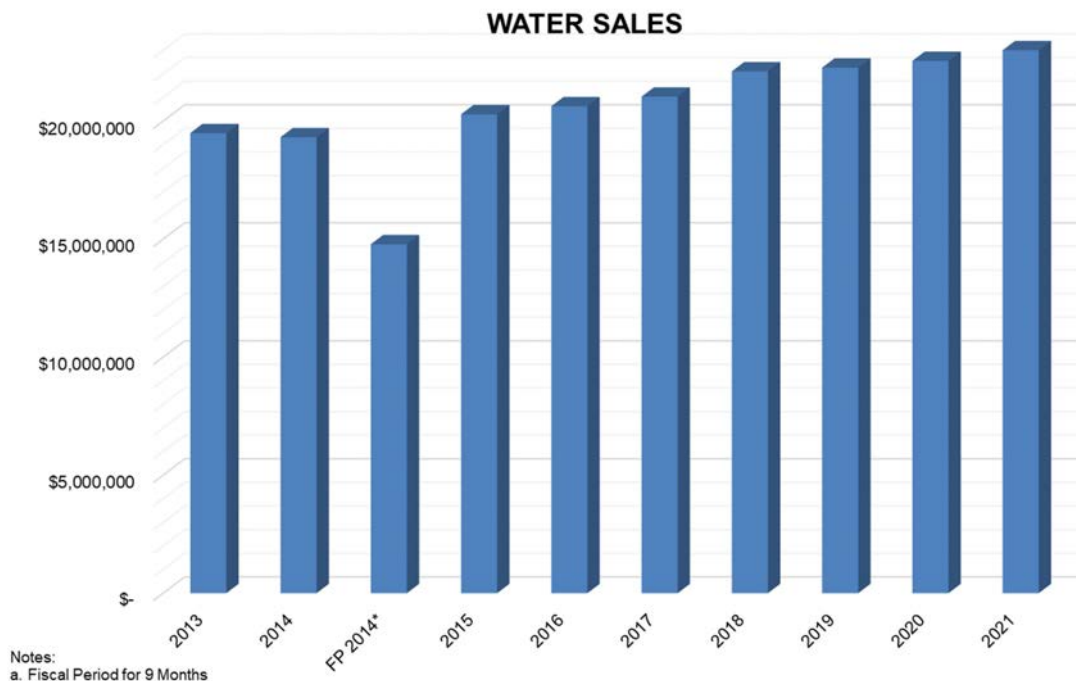
### Combined Changes in Revenue, Expenses, and Changes in Net Position - Continued

#### *Water Sales, Consumption and Production*

Operating revenues include water sales and other operating revenue (delinquency charges, fees and ancillary charges and other service revenue).

	Year Ended December 31, 2021	Year Ended December 31, 2020	Year Ended December 31, 2019
Quarterly customers	\$ 16,859,859	\$ 16,714,945	\$ 16,232,878
Monthly customers	6,233,468	5,836,327	6,031,012
Other operating revenues	1,628,405	1,092,670	1,785,089
Total operating revenues	<u>\$ 24,721,732</u>	<u>\$ 23,643,942</u>	<u>\$ 24,048,979</u>

Metered water sales for the year ended December 31, 2021, were up \$542,000 compared to the prior year. Comparing budget to actual for 2021, metered water sales were above budget by \$138,000, totaling \$23.1 million as water consumption increased 6.4 million cubic feet to 445 million cubic feet or 1.47% compared to the prior year.



# Mohawk Valley Water Authority

Management's Discussion and Analysis  
December 31, 2021 and 2020

## COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

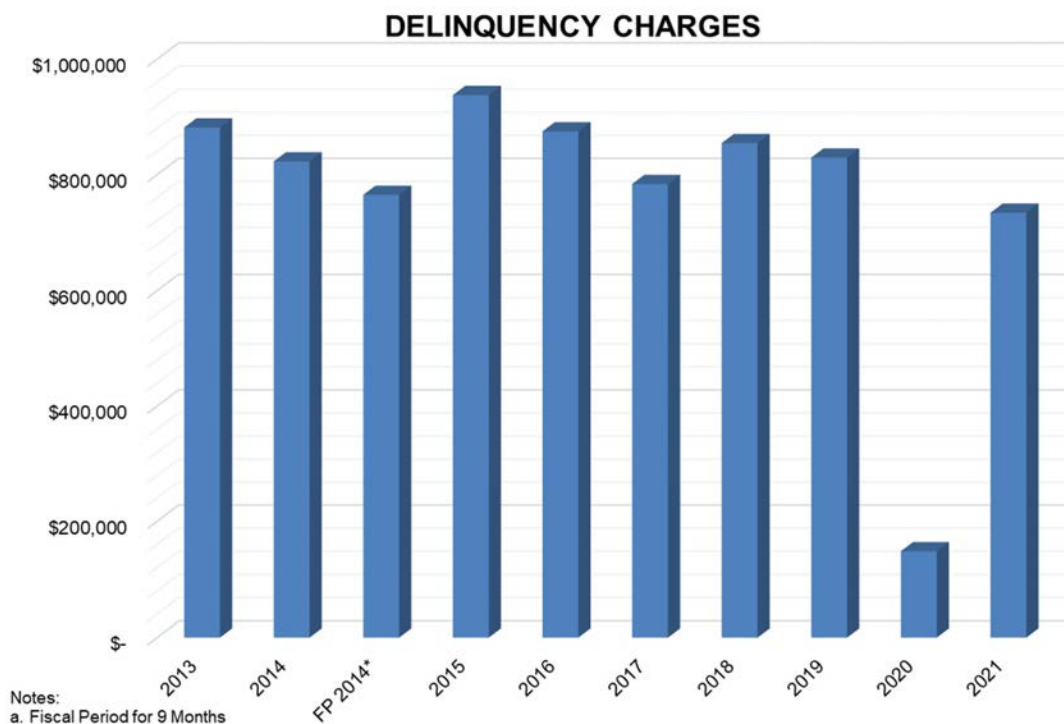
### Combined Changes in Revenue, Expenses, and Changes in Net Position - Continued

#### *Water Sales, Consumption and Production - Continued*

The increase in consumption follows a 2020 consumption decrease of approximately 3.54% and a decrease of approximately 3.67% in 2019. Since 2013, consumption has decreased 8.5%.

#### *Delinquency Charges*

Operating revenue is supplemented by charges on delinquent accounts, ancillary fees and other service charges. Of these amounts, fees and ancillary charges account for more than half of the total supplemental revenue.



Delinquency charges increased \$586,000 compared to the prior year, totaling \$734,000. Penalties and fees for unpaid bills, which were resumed after being waived due to the COVID-19 economic shutdown, increased \$554,000 compared to 2020 and were above budget by approximately \$72,000. Fees for overdue bills were \$15,000 higher than the prior year and above budget by \$66,000. The fee charged for denial of access to MVWA property (meters) is \$4,400 higher than both the prior year and the budget due to increased meter upgrades as COVID-19 restrictions eased.



# Mohawk Valley Water Authority

Management's Discussion and Analysis  
December 31, 2021 and 2020

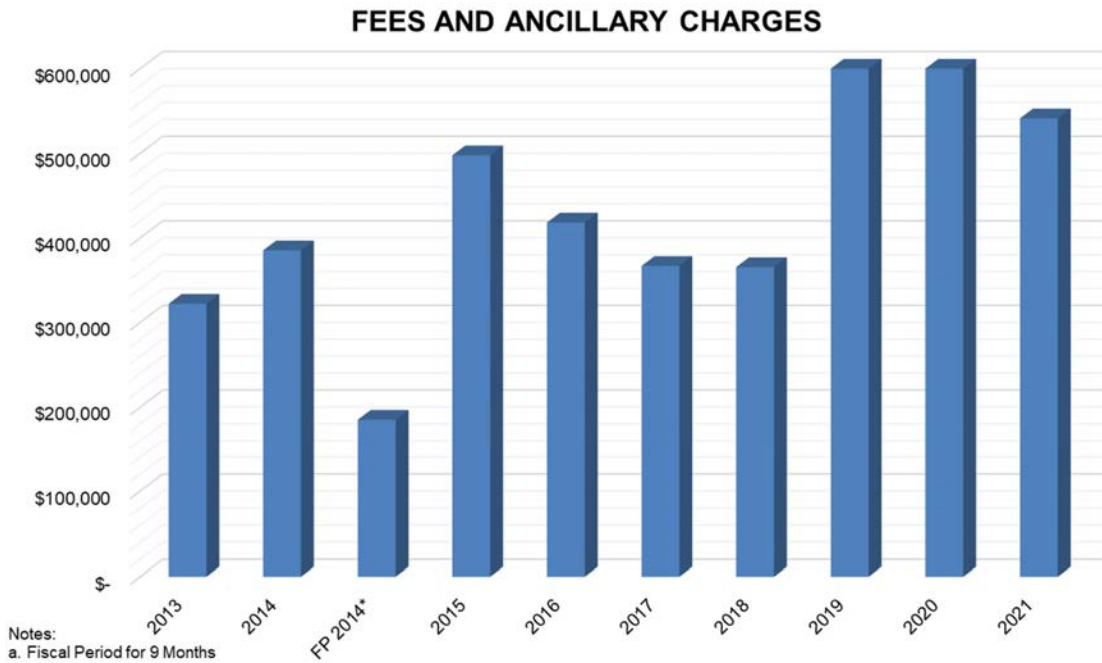
## COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

### Combined Changes in Revenue, Expenses, and Changes in Net Position - Continued

#### *Delinquency Charges - Continued*

Customer accounts that are significantly overdue or have a high dollar value have been identified for posting for delinquency and/or shut-off due to non-payment. As in past years, the collection of overdue accounts continues to be a focus. Service staff has aggressively targeted accounts overdue through posting notices and even terminating the water service for accounts that remained unpaid. Also, a greater awareness was sought to allow Water Authority staff to gain access into properties to change old meters and equipment to updated automated metering equipment. The results have been positive with greater collection and less delinquent accounts, with 2020 and 2021 being exceptions due to COVID-19 restrictions.

#### *Ancillary Fees*



# Mohawk Valley Water Authority

Management's Discussion and Analysis  
December 31, 2021 and 2020

## COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

### Combined Changes in Revenue, Expenses, and Changes in Net Position - Continued

#### *Ancillary Fees - Continued*

Ancillary-type fees were \$67,000 lower than the prior year, totaling \$541,000. The most significant decrease was in metered line charges, which were \$49,000 lower than the previous year, but \$4,700 above budget. Backflow charges were \$6,800 lower than the prior year but exceeded budget by \$43,000. In addition, charges for line taps were \$17,000 lower than the previous year but exceeded the budget by \$7,800. Overall, the total ancillary fees exceeded budget by \$68,000.

#### *Operating Expenses*

The Water Authority's expenses are budgeted annually and tracked by function. Operations are divided into departments as follows: Administration, Finance & Accounting, Customer Service, Information Technology, Engineering, Water Distribution, Water Quality, Treatment, and System Repair & Maintenance.

Before amortization and depreciation, operating expenses decreased approximately \$958,000 to \$14.8 million for the year ended December 31, 2021. Compared to budget, less depreciation and amortization, operating expenses were lower by approximately \$2.5 million for the year.

	Year Ended December 31,		
	2021	2020	2019
Other operating expenses	\$ 14,838,486	\$ 15,795,993	\$ 14,454,945
Depreciation and amortization	2,685,668	2,680,624	2,662,633
Total operating expenses	<u>\$ 17,524,154</u>	<u>\$ 18,476,617</u>	<u>\$ 17,117,578</u>

Several departments operated under budget due in part to more mild weather in early winter, some decreased activity as COVID-19 restrictions eased slowly over the year, and portions of personnel costs (salaries, wages and benefits) for engineering, water distribution and maintenance are capitalized related to the management of various capital projects under construction during 2021. Depreciation totaled \$2.7 million in 2021 as more capital projects are completed and costs are depreciated over their useful life.

Operating expenses experienced notable changes compared to the previous year in the following areas:

- Labor costs had minor increases throughout the organization consistent with contractual agreements with the Water Authority's two labor unions. The majority of the Water Authority's employees are members of two labor unions, except for a few non-represented employees. The International Brotherhood of Teamsters, Local Union 182, represents the office staff, operations staff, field labor staff and foremen. The Management Employees Association represents the remainder of the represented employees. The agreement with the Management Employees Association was extended an additional year, expiring as of March 31, 2021. This agreement remains in effect while a new agreement is negotiated. The agreement with the International Brotherhood of Teamsters, Local Union 182 is in effect until December 31, 2022.

# Mohawk Valley Water Authority

Management's Discussion and Analysis  
December 31, 2021 and 2020

## COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

### Combined Changes in Revenue, Expenses, and Changes in Net Position - Continued

#### *Operating Expenses - Continued*

- Salaries and wages for the year ended December 31, 2021 were \$5 million, which is comparable to 2020 (prior to labor and benefit allocations of approximately \$532,000 to capital projects). Any open full-time positions are anticipated to be filled during the next year.
- Health and dental insurance and retirement benefits are major portions of employee benefits. Health and dental benefits accounted for \$1,261,000 of employee benefits for 2021, an increase of \$46,000, as increased healthcare premiums were offset by amortization of OPEB deferrals. OPEB expense remained stable compared to the previous year. The employees' health insurance program includes direct reimbursement subsidies for medical and dental costs, which helps to reduce overall insurance premiums.
- The annual retirement payment increased \$114,000 in 2021 to \$793,000. However, the actuarial calculated net pension liability decreased \$3.5 million during 2021 following an increase of \$2.5 million in 2020. The 2020 increase in liability was affected by New York State's March 31st calculation date for determining pension assets. At that time, the State's investment portfolio had decreased dramatically due to the economic downturn. Based on actuarial calculations, \$369,000 was charged to pension expense for 2021, which is \$898,000 lower than 2020.
- In 2017, a private international service management company took over the daily maintenance and operation of the Water Authority's water treatment plant located in Prospect, New York. At a base cost for 2021 of \$3.2 million, clauses in the contract allow for savings on chemical purchases and other operating costs resulting from the bulk purchasing power of the service company. In addition, staffing and plant operators are managed and paid by the service company. For the year ended 2021, following a review of the fourth year of operation, a net refund of \$15,000 was realized, primarily the result of cost savings on carbon filters, offset by costs exceeding the allowance for sludge removal and hauling, the by-product of filtration at the treatment plant.
- The service company is responsible for all chemical purchases and ordinary operating costs as part of the contract. The Water Authority remains responsible for infrastructure and buildings at the treatment plant. Capital projects and other improvements at and around the treatment plant continue unfettered.
- Granulated activated carbon is used at the treatment plant to enhance water purification and achieve levels within federal drinking water standards. The carbon expense is the most expensive product used at the treatment plant at a cost of \$654,000 in 2021.
- Professional and contracted services totaled \$3.7 million in 2021. This is a decrease of \$143,000 from the prior year, primarily in fees paid for tree removals, consulting and software
- Paving costs for 2021 were \$1,1 million, which exceeded the budget by \$262,000 for the year. These costs include work on water main breaks during the year requiring restoration in addition to the road cuts originally identified.
- Electricity and gas expense totaled \$236,000 for 2021, exceeding budget by \$21,000. This is an increase of \$52,000 compared to the prior year, following a five-year downward trend. Higher rates were the primary factor in the increased costs.
- Gas and oil expense for 2021 were \$156,000, which is an increase of \$60,000 from the prior year and exceeds budget by \$48,000. Consumption and price per gallon both contributed to the unfavorable variance.

# Mohawk Valley Water Authority

Management's Discussion and Analysis  
December 31, 2021 and 2020

## COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

### Combined Changes in Revenue, Expenses, and Changes in Net Position - Continued

#### *Operating Expenses - Continued*

- Medical insurance afforded to retirees of the Water Authority increased compared to the prior year. Medical premiums paid for retirees totaled \$575,000, exceeding the budget by \$6,700. Several long-time employees retiring during the year attributed to increased premiums.
- Bad debt expense decreased \$107,000 from the prior year to \$158,000. The overall water receivable balance increased \$285,000 compared to the prior year to \$2.9 million. Consistent with operating policy of past years, as water receivables age, they are written down and/or eventually written off.

#### *Non-Operating Revenues and Expenses*

Non-operating revenues and expenses are budgeted annually and tracked by category. The following table summarizes non-operating expenses incurred during the year ended December 31, 2021 compared to 2020 and 2019:

	Year Ended December 31,		
	2021	2020	2019
Investment income	\$ 122,812	\$ 260,247	\$ 419,814
Interest expense	(2,811,678)	(2,820,411)	(2,849,168)
PILOT payments	(1,204,078)	(1,233,220)	(1,275,610)
Unrealized gains (loss) on investments	(64,237)	(11,595)	65,277
Debt issuance costs	-	(417,636)	-
Other income, net	564,285	344,705	318,720
Total non-operating revenue (expense)	<u>\$ (3,392,896)</u>	<u>\$ (3,877,910)</u>	<u>\$ (3,320,967)</u>

Significant changes from the previous year are as follows:

- Investment income from operating accounts and deposits with a trustee decreased \$137,000 compared to the prior year and were \$196,000 less than budget. Deposits to the trustee relating to construction proceeds and repair and improvement funding have been fully invested, whenever possible, to maximize earning while being mindful of arbitrage restrictions. As older investments matured, funds reinvested in 2021 earned substantially lower rates of interest.
- Interest expense consists of amounts paid on revenue bonds and to a lesser extent, on a promissory note to the City of Utica. Interest expense totaled \$2.8 million in 2021, as increased interest on 2020A and 2020B series bonds was offset by decreased interest on 2001B and 2012 series bonds, which will have final payments in 2022.
- Payments in lieu of taxes (PILOT) were made to schools and other governments in accordance with the Water Authority's state legislation totaling \$1.2 million. The final payments to school districts were made on June 30, 2021.

# Mohawk Valley Water Authority

## Management's Discussion and Analysis December 31, 2021 and 2020

### COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

#### Combined Changes in Revenue, Expenses, and Changes in Net Position - Continued

##### *Non-Operating Revenues and Expenses - Continued*

- Gains and losses on investments are derived from market fluctuations and realized gains and losses when trust fund investments are sold. For the year ended December 31, 2021, a net loss of \$64,000 was realized compared to a net loss of \$12,000 in 2020 and net gain of \$65,000 in 2019.
- Other net revenues increased \$220,000 compared to the previous year. State and Federal grants increased with funds received to offset costs for storm damages that caused washouts adjacent to reservoirs and for water main replacement permanent repairs in the City of Utica. Offsetting this increase was a decrease in independent lab revenue as there is no longer a requirement for enhanced water testing by water systems.

#### Cash Flows

The following table summarizes the sources and uses of cash during the years ended December 31, 2021, 2020 and 2019:

	Year Ended December 31,		
	2021	2020	2019
Operating activities	\$ 8,361,478	\$ 6,933,802	\$ 9,184,595
Non-capital financing activities	(992,974)	(1,053,673)	(1,367,680)
Investing activities	1,768,262	(9,711,282)	843,845
Capital & related financing activities	(10,069,190)	6,277,501	(8,299,607)
Net increase (decrease) in cash and cash equivalents	(932,424)	2,446,348	361,153
Cash and cash equivalents, beginning of year	14,835,385	12,389,037	12,027,884
Cash and cash equivalents, end of year	<u>\$ 13,902,961</u>	<u>\$ 14,835,385</u>	<u>\$ 12,389,037</u>

The Authority's available cash and cash equivalents decreased \$932,000 at December 31, 2021, to a total of \$13.9 million.

Cash flow generated from operating activities increased \$1.4 million comparing 2021 to the previous year. Receipts from water customers increased during the year due in part to a recovery after the economic shutdown in 2020 and a mild water rate increase. Water consumption increased 1.5% compared to 2020. In addition, payments to suppliers increased from the prior year.

Cash and cash equivalents used for non-capital financing activities, consisting primarily of PILOT payments and sewer collections to other municipalities, decreased in 2021 compared to the previous year. PILOT payments to school districts expired while payment to the City of Utica and Oneida County are scheduled to increase in the next year.

Cash and cash equivalents provided by or used for investing activities consists of amounts from the purchase, sale and interest earnings on investments. For 2021, no new funds were invested while deposits for construction projects were drawn down over the year. Interest earnings of \$123,000 were realized during the year. In the prior year, 2021A bonds were issued for \$14.9 million with a deposit into the construction fund of \$15.2 million. A net amount of \$10 million of investments were purchased, sold or matured the result of investing these new construction proceeds and remaining construction funds from previous bond issues.

# Mohawk Valley Water Authority

Management's Discussion and Analysis  
December 31, 2021 and 2020

## COMBINED FINANCIAL STATEMENT HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2021 - CONTINUED

### Cash Flows - Continued

Cash and cash equivalents from capital and related financing activities consists of amounts used to acquire and construct capital assets, the payment of principal on long-term debt and loans and interest paid. Payments on principal debt, capital appreciation bonds and a promissory note totaled \$4.0 million, which were comparable to the \$4.5 million principal paid in 2020. Interest paid on these bonds and note totaled \$2.8 million, a \$827,000 increase in comparison to 2020. In the prior year, \$28 million of proceeds was obtained in debt for future capital construction and to pay off existing debt.

### OUTLOOK FOR 2022

#### Infrastructure

The Water Authority continues to invest funds back into the water infrastructure through numerous capital projects, enhancing technologies and increasing customer payment options. There are currently thirty-seven (37) projects totaling \$9.8 million in various stages of completion. In the next several years, approximately \$25.0 to \$125.0 million will be spent on these current projects and several new projects depending on growth and build-out at the nano center site adjacent to SUNY Polytechnic Institute in Marcy, New York. A few of the larger capital projects currently underway or near completion are as follows:

- The construction of a 12-million-gallon water storage tank at the top of Snowden Hill Road in the Town of New Hartford at a current cost of \$2.7 million. The tank is near completions and will provide needed storage and pressure to the "High-High" service zone of the water system.
- The replacement of transmission mains under the Erie Canal are in the final stages of completion with a current cost of \$1.1 million. This is a special "direction drilling" project whereby new 24-inch polyethylene pipes are pulled through drilled paths under the Erie Canal. This technique was used to bore under the canal while replacing the old and imminently failing transitions mains. Connections were fused by a special heat fusing machine.
- Replacement of old cast iron mains installed in 1915 in and around the former Marcy reservoir with new twenty-four-inch transmission mains along Cavanaugh Road in the Town of Marcy at a current project cost of \$962,000. When completed, these transmission mains will eliminate the old 1915 cast iron mains and be available for a future 12 to 15 million gallon water storage tank currently in the design stage.
- A new pipe bridge currently being designed and constructed offsite will be installed over the West Canada creek gorge just east of the water treatment plant at an estimated cost of \$4 million. The current work in process amount is \$421,000. When completed, this pipe bridge will eventually replace one of the two existing pipe bridges that span over the gorge. This will ensure a reliable flow of water for the future and any anticipated expansion of water service to new areas and growth within the system.

# Mohawk Valley Water Authority

## Management's Discussion and Analysis December 31, 2021 and 2020

### OUTLOOK FOR 2022 - CONTINUED

#### Infrastructure - Continued

- Water main replacements in downtown Utica along Route 5S as part of the New York State Department of Transportation's road improvements at a current cost of \$524,000. In coordination with the Department of Transportation, road enhancements will occur along this Route 5 corridor in the City of Utica including a roundabout for vehicles traveling on Route 5 and John Street. At that time, new distribution main will be installed outside the corridor and the old mains under the road will be abandoned.
- Phase II of a new raw water transmission main from Hinckley reservoir to the water treatment plant which includes 5,400 linear feet of new transmission mains which will connect to the new pipe bridge (phase I). The estimated cost is \$10 million. Funding for this project will be from NY State grants and the 2020 Series A bonding.

Staff monitors consumption and variances to budget of revenue and expense items on a monthly basis and reports to the Board of Directors as part of their financial reporting. Management of the Water Authority does not assert projections of revenues and expenses as being factual; however, estimates always have to be made when devising a budget.

#### Covenants

Under the Authority's Master Bond Resolution, deposits to the debt service reserve accounts must meet the debt service reserve requirement. The debt service reserve requirement is the lesser of: a) maximum annual debt service on current and future debt service; b) 125% of the average annual debt service; or c) the maximum amount that may be held in the debt service reserve fund. As of December 31, 2021, the Water Authority exceeded the debt service reserve requirement calculated as 125% of the average annual debt service in the amount of \$4,471,423 with a balance of \$4,667,523 in the debt service reserve funds.

In addition, a repair and improvement reserve of \$500,000 was established and maintained with the trustee. The repair and replacement balance exceeds this initial requirement at a current balance of \$610,000.

### REQUEST FOR INFORMATION

This report is designed to provide a general overview of the Mohawk Valley Water Authority's finances for all those interested. Questions concerning any of the information provided in this report or requests for additional information should be addressed in writing to:

Mohawk Valley Water Authority  
Executive Director  
One Kennedy Plaza  
Utica, New York 13502  
[www.mvwa.us](http://www.mvwa.us)

# Mohawk Valley Water Authority

## Combined Statements of Net Position

	December 31,	
	2021	2020
<b>UTILITY PLANT, AT COST</b>		
Utility plant, not being depreciated	\$ 11,836,146	\$ 10,035,913
Utility plant, net of depreciation	77,359,471	77,786,596
Net utility plant, at cost	89,195,617	87,822,509
 <b>CURRENT ASSETS</b>		
Cash and cash equivalents		
Unrestricted	8,705,882	9,599,332
Board designated	1,049,846	1,752,005
Restricted	4,147,233	3,484,048
Investments		
Board designated	3,643,714	3,041,482
Restricted	19,669,513	23,523,168
Water receivables, net	2,932,084	2,647,234
Other receivables	45,419	80,452
Materials inventory	806,571	942,469
Prepaid expenses	-	101,734
Total current assets	41,000,262	45,171,924
 <b>NONCURRENT ASSETS</b>		
Investments		
Board designated	366,179	-
Restricted	2,527,907	1,352,351
Total noncurrent assets	2,894,086	1,352,351
<b>TOTAL ASSETS</b>	<b>\$ 133,089,965</b>	<b>\$ 134,346,784</b>
 <b>DEFERRED OUTFLOWS OF RESOURCES</b>	<b>\$ 6,240,854</b>	<b>\$ 5,596,226</b>

See Notes to Combined Financial Statements.



# Mohawk Valley Water Authority

## Combined Statements of Net Position - Continued

	<b>December 31,</b>	
	<b>2021</b>	<b>2020</b>
<b>LONG-TERM OBLIGATIONS</b>		
Bonds and notes payable, less current installments	\$ 61,934,656	\$ 65,603,361
Other liabilities	12,603,464	16,852,329
Total long-term obligations	74,538,120	82,455,690
<b>CURRENT LIABILITIES</b>		
Accounts payable	292,431	269,157
Construction contracts	299,850	490,685
Accrued liabilities	293,359	261,486
Accrued interest	485,919	485,384
Sewer service collections due to municipalities	1,970,456	1,759,352
Current portion of bonds and notes payable	3,656,741	3,738,634
Current portion of other liabilities	1,992,194	1,795,671
Total current liabilities	8,990,950	8,800,369
<b>TOTAL LIABILITIES</b>	<b>\$ 83,529,070</b>	<b>\$ 91,256,059</b>
<b>DEFERRED INFLOWS OF RESOURCES</b>	<b>\$ 4,611,354</b>	<b>\$ 1,301,238</b>
<b>NET POSITION</b>		
Net investment in capital assets	\$ 45,245,621	\$ 42,444,513
Restricted for		
Repairs and improvement	610,006	611,020
Debt service	3,991,747	4,252,745
Unrestricted	1,343,021	77,435
<b>TOTAL NET POSITION</b>	<b>\$ 51,190,395</b>	<b>\$ 47,385,713</b>

See Notes to Combined Financial Statements.

# Mohawk Valley Water Authority

## Combined Statements of Revenues, Expenses, and Changes in Net Position

	Years Ended December 31,	
	2021	2020
<b>OPERATING REVENUE</b>		
Metered water sales	\$ 23,093,327	\$ 22,551,272
Delinquency charges	733,731	148,198
Fees and ancillary charges	541,161	608,429
Other services	353,513	336,043
Total operating revenue	24,721,732	23,643,942
<b>OPERATING EXPENSES</b>		
Administrative	549,463	634,022
Human resources and safety	380,848	623,085
Finance and accounting	705,984	729,167
Customer service	443,382	493,510
Engineering	656,857	671,938
Water distribution	579,213	469,012
Information technology	802,561	931,934
Water quality maintenance	666,679	731,520
Treatment	3,184,730	3,215,989
System repair and maintenance	5,460,872	5,886,260
General services	1,292,673	1,286,512
Postemployment health benefits	115,224	123,044
Amortization of bond expenses	5,746	2,124
Depreciation	2,679,922	2,678,500
Total operating expenses	17,524,154	18,476,617
<b>Operating Income</b>	<b>7,197,578</b>	<b>5,167,325</b>
<b>NONOPERATING REVENUE (EXPENSE)</b>		
Investment income	122,812	260,247
Interest expense	(2,811,678)	(2,820,411)
PILOT payments	(1,204,078)	(1,233,220)
Independent lab services, net	59,836	68,049
State and federal grants	181,042	172,501
Unrealized loss on investments	(64,237)	(11,595)
Debt issuance costs	-	(417,636)
Other income, net	323,407	104,155
Total non-operating revenue (expense)	(3,392,896)	(3,877,910)
<b>CHANGE IN NET POSITION</b>	<b>3,804,682</b>	<b>1,289,415</b>
Net position, beginning of year	47,385,713	46,096,298
Net position, end of year	<b>\$ 51,190,395</b>	<b>\$ 47,385,713</b>

See Notes to Combined Financial Statements.

# Mohawk Valley Water Authority

## Combined Statements of Cash Flows

	<b>Years Ended December 31,</b>	
	<b>2021</b>	<b>2020</b>
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Receipts from customers	\$ 24,138,078	\$ 22,935,077
Payments to suppliers	(11,926,285)	(11,652,335)
Payments to employees	(3,658,418)	(3,947,783)
Payments for employee benefits	(1,056,724)	(802,038)
Other receipts	864,827	400,881
	<b>8,361,478</b>	<b>6,933,802</b>
<b>CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES</b>		
Payments to other governments	<b>(992,974)</b>	<b>(1,053,673)</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Interest received from investments	122,812	260,247
Purchase of investments	-	(9,971,529)
Proceeds from sale and maturities investment securities	1,645,450	-
	<b>1,768,262</b>	<b>(9,711,282)</b>
<b>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES</b>		
Acquisition and construction of capital assets	(3,763,142)	(4,842,377)
Proceeds from issuance of revenue bonds	-	17,237,060
Other nonoperating revenue and expense, net	564,285	344,705
Principal payments on long-term bonds	(3,238,058)	(4,295,000)
Principal payments on capital appreciation bonds	(628,026)	-
Principal payments on promissory note	(192,571)	(181,860)
Interest paid	(2,811,678)	(1,985,027)
	<b>(10,069,190)</b>	<b>6,277,501</b>
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>(932,424)</b>	<b>2,446,348</b>
<b>CASH AND CASH EQUIVALENTS, beginning of year</b>	14,835,385	12,389,037
<b>CASH AND CASH EQUIVALENTS, end of year</b>	<b>\$ 13,902,961</b>	<b>\$ 14,835,385</b>

See Notes to Combined Financial Statements.

# Mohawk Valley Water Authority

## Combined Statements of Cash Flows - Continued

	<b>Years Ended December 31,</b>	
	<b>2021</b>	<b>2020</b>
<b>RECONCILIATION OF OPERATING INCOME TO CASH FLOWS</b>		
<b>FROM OPERATING ACTIVITIES</b>		
Operating income	\$ 7,197,578	\$ 5,167,325
Adjustments to reconcile operating income to cash flows from operating activities:		
Depreciation	2,679,922	2,678,500
Amortization of bond expenses	5,746	2,124
Provision for bad debts	158,234	265,503
Use of equipment for capital projects	9,085	7,954
(Increase) decrease in operating assets:		
Billed water receivables & other receivables	(408,051)	(501,465)
Materials inventory	144,983	(53,783)
Prepaid expenses	101,734	(101,734)
Deferred outflows of resources	(650,374)	(1,988,201)
Increase (decrease) in operating liabilities:		
Accounts and construction payable	(167,559)	(352,636)
Accrued liabilities	(552,639)	(78,370)
Capital leases	(83,697)	(81,775)
Deferred inflows of resources	3,310,116	456,990
Other postemployment benefits liability	214,314	(1,059,165)
Net pension liability	(3,528,712)	2,503,108
Compensated absences	(69,202)	69,427
	<b>\$ 8,361,478</b>	<b>\$ 6,933,802</b>
<b>NONCASH INVESTING ACTIVITIES, AND CAPITAL AND RELATED FINANCING ACTIVITIES</b>		
Change in fair value of investments	\$ (64,237)	\$ (11,595)
Accretion on capital appreciation bonds	791,929	748,917
Series 2012 bonds partially redeemed	-	10,230,000

See Notes to Combined Financial Statements.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 1 - Significant Accounting Policies

The combined financial statements of the Mohawk Valley Water Authority (hereafter referred to as the "Water Authority") have been prepared in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) as applied to governmental units. The accounts are maintained substantially in accordance with the Uniform System of Accounts for Water Utilities. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

Included in the Water Authority reporting entity is a blended component unit, the Upper Mohawk Valley Regional Water Finance Authority (hereafter referred to as the "Finance Authority"). The reason for its inclusion in the Water Authority is more fully described in Note 1a, Reporting Entity.

#### *Introduction*

The Water Authority and the Finance Authority were created on August 2, 1994 pursuant to Title 10 and Title 10-A, respectively, of Article 5, §1226.e and §1226.c, of the Public Authorities Law of the State of New York.

On October 23, 2002, the Upper Mohawk Valley Regional Water Board filed and subsequently received a "Certificate of Amendment of Assumed Name," from the State of New York's Department of State, Division of Corporations changing the name of the public benefit corporation to the "Mohawk Valley Water Authority." Essentially, the public utility is "doing business as" - (dba) Mohawk Valley Water Authority.

The Water Authority is a corporate municipal instrument of the State of New York consisting of twelve appointed Board members responsible for the overall operations of the water system.

The Finance Authority is a public benefit corporation of the State of New York consisting of five members primarily responsible for financing projects of the Water Authority through issuance of debt and subsequent payment of the debt.

Board members for both the Water Authority and Finance Authority are appointed pursuant to the enabling legislation.

On December 19, 1996, the Finance Authority issued bonds for the benefit of the Water Authority, to enable purchase of the assets, net of liabilities, of the public water system from the City of Utica. The Water Authority began operation of the public water system on December 19, 1996.

The regional water system includes facilities within the following jurisdictions:

Villages of:	Towns of:	Cities of:
Clark Mills	Deerfield	Utica
Holland Patent	Frankfort	
New Hartford	Kirkland	
New York Mills	Marcy	
Oriskany	New Hartford	
Whitesboro	Schuyler	
Yorkville	Trenton	
	Whitestown	

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 1 - Significant Accounting Policies - Continued

#### *Introduction - Continued*

Currently there are approximately 38,000 residential and 1,000 commercial customers. Total population served by the water system is estimated in the range of 120,000 to 130,000 customers. The average daily production for the current year is 16.9 million gallons per day (MGD), consistent with the average daily production for the past several years.

Hinckley Reservoir serves as the source of water for the system. The reservoir is located approximately 18 miles north of the City of Utica. The 25.8-billion-gallon reservoir is a multi-use facility owned by the State of New York. In addition to use by the Mohawk Valley Water Authority, the New York Power Authority and the Canal Corporation's Barge Canal use the reservoir as a water supply for power generation, flood control and recreation. The New York State Power Authority controls regulation of the water level and discharge at the Hinckley Reservoir. The reservoir watershed area covers 373 square miles in the southerly areas of the Adirondack Mountains, most of which lies within the Adirondack Park region.

The water system transmission and distribution mains total 42.8 miles and 560 miles, respectively.

#### *a. Reporting Entity*

The basic financial statements include the primary entity, the Water Authority, as well as a blended component unit, the Finance Authority, determined to be includable in the Water Authority's financial reporting entity.

The decision to include a potential component unit in the Water Authority's reporting entity is based on several criteria, including legal standing, fiscal dependency, and financial accountability.

#### *b. Blended Presentation of Component Unit*

Blended component units, although legally separate entities are, in substance, part of the government's operations. The following is a brief description of the blended component unit included in the primary government:

- On August 2, 1994, state legislation created the Upper Mohawk Valley Regional Water Finance Authority ("Finance Authority"), under provisions of §1226.c of the Public Authorities law of the State of New York. The Finance Authority consists of five Board members including a chairperson, a vice-chair and a treasurer.
- On December 19, 1996, the Finance Authority issued revenue bonds in the amount of \$28.3 million, with varying interest rates, to purchase the water system from the City of Utica. The proceeds of this issue were designated for the operation, expansion and improvement of the water system, in compliance with state standards. These bonds were subsequently defeased through an advanced refunding with the issuance of the 2001A series bonds.

Among the powers given to the Finance Authority is the ability to borrow money and issue negotiable or non-negotiable notes, bonds or other obligations for the acquisition, renovation and improvement to the regional water system. The Finance Authority may also apply for licenses, permits and approval of plans associated with the acquisition, renovation and improvement of the regional water system. In the process of borrowing funds to improve facilities, professional consultants may be retained to offer technical services and advice for the purpose and benefit of acquiring or improving the regional water system.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 1 - Significant Accounting Policies - Continued

#### *b. Blended Presentation of Component Unit - Continued*

The Finance Authority has entered into an agreement with the Water Authority, the primary entity, to make payments for the debt service on the originally issued bonds and any subsequent bonds or other debt issued by the Finance Authority. The Water Authority is also required to make payments to the Finance Authority for payment in lieu of taxes (PILOT) payments to certain municipalities and school districts, and to make funds available for the Finance Authority to make payments on the promissory note owed to the City of Utica and to fund the Repair and Improvement Fund. The obligation to make these payments is a general obligation for which the Water Authority's full faith and credit are pledged.

In consideration for operating the regional water system and the financing of capital projects from time to time, the Water Authority leases all its rights, title and interest of the regional water system and capital projects to the Finance Authority under terms and conditions of the original financing agreement. In turn, the Financing Authority appoints the Water Authority as the exclusive operator of the regional water system.

The Finance Authority is considered a component unit since the Water Authority is obligated to pay debt service, PILOT payments, and fund other accounts of the Finance Authority. Thus, the Finance Authority is "fiscally dependent" upon the Water Authority to establish and collect rates and fees necessary to pay these debts. Further, the Finance Authority is "blended" with the Water Authority in the combined financial statements because the Finance Authority exists solely to provide services that predominantly benefit the Water Authority.

All significant accounts and transactions between the Finance Authority and Water Authority are eliminated in this financial report.

#### *c. Measurement Focus, Basis of Accounting and Combined Financial Statement Presentation*

The activities of the Water Authority are similar to those often found in the private sector (proprietary-type accounting). The measurement focus is upon determination of net income, financial position, and cash flows.

Proprietary type accounting records transactions on a cost of services or economic resources measurement focus. This means all assets, deferred outflows of resources, liabilities, and deferred inflows of resources, whether current or non-current, associated with this activity are included on the statement of net position. The equity consists of net position and contributed capital, if any. The statements of revenues, expenses and changes in net position present increases (revenues) and decreases (expenses) in total net position.

Basis of accounting refers to when revenues, expenses, and the related assets, deferred outflows of resources, liabilities, and deferred inflows of resources are recognized and reported in the combined financial statements. Specifically, it relates to the timing of the measurements made regardless of the nature of the measurement.

The Water Authority uses the accrual basis of accounting, whereby revenues are recognized when earned, and expenses are recorded when incurred. Proprietary type accounting also distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing water services and producing potable water for the service area in connection with the Water Authority's principle ongoing operations. The principal operating revenues of the Water Authority are charges to customers to provide potable water service. Other ancillary fees and services related to providing water are also recognized as operating revenues. Operating expenses include the cost of service, administration and depreciation of capital assets. All revenues and expenses not meeting these definitions are reported as non-operating revenues and expenses.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 1 - Significant Accounting Policies - Continued

*c. Measurement Focus, Basis of Accounting and Combined Financial Statement Presentation - Continued*

When both restricted and unrestricted resources are available for use, it is the Water Authority's policy to use restricted resources first, then unrestricted resources as they are needed.

*d. Accounting Standards Issued But Not Yet Implemented*

GASB Statement No. 87, *Leases* (GASB 87). GASB 87 requires recognition of certain lease assets and liabilities that previously were classified as operating leases and the recognition of inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under GASB 87, a lessee is required to recognize a lease liability and an intangible right-to-use asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The requirements of GASB 87, as delayed by GASB 95, are effective for reporting periods beginning after June 15, 2021.

GASB Statement No. 91, *Conduit Debt Obligations* (GASB 91). The primary objectives of GASB 91 are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. GASB 91 achieves those objectives by clarifying the existing definition of a conduit debt obligation; establishing that a conduit debt obligation is not a liability of the issuer; establishing standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improving requirement note disclosures. The requirements of GASB 91, as delayed by GASB 95, are effective for reporting periods beginning after December 15, 2021.

GASB Statement No. 92, *Omnibus 2021* (GASB 92). GASB 92 addresses a variety of topics including leases, intra-entity transfers, fiduciary activities, public entity risk pools/reinsurance recoveries, fair value measurements, and derivative instrument technology. Guidance related to leases, reinsurance recoveries and derivative instrument technology was effective upon issuance of GASB 92 in January 2020. The remaining components of GASB 92, as delayed by GASB 95, are effective for periods beginning after June 15, 2021.

GASB Statement No. 93, *Replacement of Interbank Offered Rates* (GASB 93). GASB 93 addresses governments that have entered into agreements in which variable payments made or received depend on an interbank offered rate (IBOR) – most notably, the London Interbank Offered Rate (LIBOR). As a result of global reference rate reform, the LIBOR is expected to cease to exist in its current form at the end of 2021, prompting governments to amend or replace financial instruments for the purpose of replacing LIBOR with other reference rates, by either changing the reference rate or adding or changing fallback provisions to the reference rate. The objective of GASB 93 is to address accounting and financial reporting implications that result from the replacement of IBOR, such as providing exceptions for certain hedging derivative instruments to the hedge accounting termination provisions when an IBOR is replaced as the reference rate of the hedging derivative instrument's variable payment, clarifying the hedge accounting termination provisions when a hedged item is amended to replace the reference rate, removing LIBOR as an appropriate benchmark interest rate for the qualitative evaluation of the effectiveness of an interest rate swap, and clarifying the definition of reference rate. The removal of the London IBOR as an appropriate benchmark interest rate is effective for reporting periods beginning after December 31, 2021. The requirements to lease modifications, as delayed by GASB 95, are effective for reporting periods beginning after June 15, 2021. All other requirements of GASB 93 were effective for reporting periods beginning after June 15, 2020.



# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 1 - Significant Accounting Policies - Continued

#### *d. Accounting Standards Issued But Not Yet Implemented - Continued*

GASB Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements* (GASB 94). The primary objective of GASB 94 is to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements (PPPs). As used in GASB 94, a PPP is an arrangement in which a government (the transferor) contracts with an operator (a government or nongovernment entity) to provide public services by conveying control of the right to operate or use a nonfinancial asset, such as infrastructure or other capital assets (the underlying PPP asset), for a period of time in an exchange or exchange-like transaction. Some PPP's meet the definition of a service concession arrangement (SCA), which GASB defines in GASB 94 as a PPP in which: (1) the operator collects and is compensated by fees from third parties; (2) the transferor determines or has the ability to modify or approve which services the operator to require to provide, to whom the operator is required to provide the services, and the prices or rates that can be charged for the services; and (3) the transferor is entitled to significant residual interest in the service utility of the underlying PPP asset at the end of the arrangement. GASB 94 also provides guidance for accounting and financial reporting for availability payment arrangements (APAs). As defined in GASB 94, an APA is an arrangement in which a government compensates an operator for services that may include designing, constructing, financing, maintaining, or operating an underlying nonfinancial asset for a period of time in an exchange or exchange-like transaction. The requirements of GABS 94 are effective for fiscal years beginning after June 15, 2022.

GASB Statement No. 96, *Subscription-Based Information Technology Arrangements* (GASB 96). GASB 96 provides guidance on the accounting and financial reporting of subscription-based information technology arrangements (SBITA) including the definition of a SBITA, establishment of a right-to-use subscription asset and related liability, providing capitalization criteria, and requiring note disclosures. The requirements of GASB 96 are effective for reporting periods beginning after June 15, 2022.

GASB Statement No. 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans, and amendment of GASB Statements No. 14 and No. 84, and a supersession of GASB Statement No. 32* (GASB 97). GASB 97 has three objectives: (1) to increase consistency and comparability related to the reporting of fiduciary component units in circumstances in which a potential component unit does not have a governing board and the primary government performs the duties that a governing board would typically perform; (2) to mitigate costs associated with the reporting of certain defined contribution pension plans; defined contribution other postemployment benefit plans (OPEB), and employee benefit plans other than pension plans or OPEB plans as fiduciary component units in fiduciary fund financial statements; and (3) to enhance the relevance, consistency, and comparability of the accounting and financial reporting for the Internal Revenue Code Section 457 deferred compensation plans that meet the definition of a pension plan and for benefits provided through those plans. Certain requirements of GASB 97 are effective immediately, and certain requirements are effective for reporting periods beginning after June 15, 2021.

Management has not estimated the extent of the potential impact of these statements on the Water Authority's combined financial statements.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 1 - Significant Accounting Policies - Continued

#### *e. Budgets and Budgetary Accounting*

The annual budget is the financial plan for the operation of the Water Authority and Finance Authority. The Board has adopted a cash basis format for developing annual budgets. Large variances between budget figures and actual amounts can often be attributed to the recording of actual amounts on the accrual basis of accounting and the cash basis reporting used for budget purposes.

#### *f. Fair Value Measurements*

Certain assets are reported at fair value, which is defined as the price that would be received to sell an asset in an orderly transaction between market participants on the measurement date.

#### *g. Cash, Cash Equivalents, and Investments*

Cash includes amounts in demand deposits. Cash equivalents include all highly liquid investments with original maturities of three months or less when purchased. All cash deposits are fully collateralized or covered by federal deposit insurance.

Investments consist of obligations of the United States and its agencies and certificates of deposit. Investments are carried at fair value.

#### *h. Receivables*

Water receivables consist primarily of amounts due from customers for current and delinquent water charges, including penalties, unpaid bill charges, collection fees and shut-off charges.

Customers are billed either on a monthly or quarterly basis depending on the type of customer (commercial or residential), and the level of water usage. Customers are provided a thirty-day (30) payment period from the billing date to pay their current water charges. Various fees may be leveled against an account if a bill is unpaid after 30 days, and accounts over 90 days delinquent may have their water service terminated.

Annually, at the Water Authority's discretion, if the delinquent balance remains unpaid, the amount is delivered to the respective government jurisdiction (county, city or village government) and added to their respective tax bill. As the City of Utica collects delinquent water charges, they are remitted to the Water Authority. The collections of delinquent town and village water charges are remitted at the end of their respective fiscal year ends.

Management reviews the ability to collect delinquent water charges on an ongoing basis. Based upon past history, management has determined that the ability to collect delinquent receivables decreases rapidly as they become increasingly stale. The value of delinquent water receivables is reduced in a range from 20% to 85% as each subsequent operating year expires and collection of these water receivables has been unsuccessful. At December 31, 2021 and 2020, an allowance for uncollectible accounts of water sales has been established in the amount of approximately \$477,900 and \$404,300, respectively.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 1 - Significant Accounting Policies - Continued

#### *i. Materials Inventory*

Material and supplies inventory is stated at the lower of cost or realizable value. Items consisting of meters, hydrants and piping are valued on the first-in first-out (FIFO) method. These materials are expensed when installed into the water system as part of overall maintenance. Chemicals used in the treatment of water are purchased in large quantities and stored by various methods depending on the volatility of the material. The material is expensed as used in the treatment of the water.

#### *j. Prepaid Expenses*

Prepaid expenses are recognized when cash outflows are made prior to the performance of a service or consumption of a resource. The balance, if any, generally consists of PILOT payments, property and liability insurance. Timing of these payments dictates recognizing the pre-payment.

#### *k. Utility Plant*

Utility Plant acquired by the Water Authority with an initial individual cost of more than \$5,000 and an estimated useful life in excess of one year are capitalized and recorded on the statement of net position. Such assets are stated at cost. Cost includes material, direct and indirect labor and other items such as, payroll taxes, employee benefits, transportation and certain preliminary legal, engineering and survey costs. The cost of repairs and maintenance is expensed as incurred. Contributed assets, including transmission mains, hydrants, tanks, and pump stations are recorded at fair value at the date received.

Construction projects are conducted on a continual basis in order to maintain or enhance the water system. Preliminary legal, engineering and surveying costs include studies conducted prior to the actual construction period that directly result in specific construction projects. While capital projects are in process, all associated costs are recorded as work-in-process. Once complete, all costs, including legal, engineering, surveying and construction costs, are reclassified to their respective asset categories and depreciated according to their useful lives.

Depreciation is recorded using the straight-line method. The estimated useful lives for the major classes of assets include the following:

<u>Class</u>	<u>Life in Years</u>
Treatment Facilities	25-75
Office and Lab Equipment	5
Vehicles and Maintenance Equipment	5
Water Transmission and Storage	20-100
Distribution Facilities	15-100

#### *l. Impairments*

Long-lived assets held and used in operations are reviewed for recoverability whenever events or changes in circumstances indicate that the related carrying amount may not be recoverable. When required, impairment losses on assets to be held and used are recognized based on the excess of the asset's carrying amount over its fair value.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 1 - Significant Accounting Policies - Continued

#### *m. Deferred Outflows of Resources and Deferred Inflows of Resources*

Deferred outflows of resources represent a consumption of net position that applies to a future period and so will not be recognized as an outflow of resources (expense) until that time. A summary of the Authority's deferred outflows of resources at December 31, 2021 and 2020 are presented in Note 6.

Deferred inflows of resources represent an acquisition of net position that applies to a future period and so will not be recognized as an inflow of resources (revenue) until that time. The following schedule summarizes the Water Authority's deferred inflows of resources as of December 31, 2021 and 2020:

	December 31,	
	2021	2020
Other postemployment benefits related	\$ 676,028	\$ 1,110,550
Pension related	3,935,326	190,688
	<u>\$ 4,611,354</u>	<u>\$ 1,301,238</u>

#### *n. Bond and Note Premiums and Discounts*

Bond and note premiums and discounts are presented as a component of bonds payable. The premiums and discounts are amortized over the life of the bonds and notes using the effective interest method and charged against interest expense. Net amortization related to bond and note premiums and discounts approximated \$105,000 and \$87,000 for the years ended December 31, 2021 and 2020, respectively.

#### *o. Vacation, Sick Leave, and Compensatory Absences*

Water Authority employees are granted vacation and sick leave and earn compensatory absences in varying amounts. In the event of termination or upon retirement, all union employees are entitled to payment for the accumulated vacation, sick and compensatory time limited to amounts defined under their respective collectively bargained agreements. All non-union employees are entitled to similar benefits as defined by their respective contracts with the Water Authority.

Payment of vacation, sick leave and compensatory time is dependent upon many factors; therefore, timing of future payments is not readily determinable. However, management believes that sufficient resources will be available for the payment of vacation, sick leave and compensatory time when such payments become due.

#### *p. Retirement Plan*

The Water Authority provides retirement benefits for substantially all of its regular, full-time employees through contributions to the New York State and Local Employees' Retirement System (the System). The System provides various plans and options, some of which require employee contributions. The retirement system computes the cost of retirement benefits based on their fiscal year, April 1 to March 31. See Note 7 for more detail.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 1 - Significant Accounting Policies - Continued

#### *q. Other Postemployment Benefits*

The Water Authority recognizes in its financial statements the financial impact of other postemployment benefits. The impact on the Water Authority's financial position and results of operations is more fully disclosed in Note 9.

#### *r. Net Position*

The basic combined financial statements utilize a net position presentation. Net position is categorized as follows:

- Net investment in capital assets - This component of net position reflects the portion that is associated with non-liquid, capital assets net of accumulated depreciation and less outstanding capital asset related debt. Significant unspent related debt proceeds at year-end are excluded.
- Restricted assets - This component of net position consists of assets with external constraints placed on their use by creditors, debt covenants, grantors, enabling legislation or regulation of other governments imposed by law.
- Unrestricted assets - This component of net position is comprised of all items that do not meet the definition of the two categories above.

#### *s. Use of Estimates*

The preparation of the combined financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, deferred outflows, liabilities, and deferred inflows and disclosure of contingent assets and liabilities at the date of the combined financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### *t. Subsequent Events*

The Water Authority has evaluated subsequent events for potential recognition or disclosure through March 29, 2022, the date the combined financial statements were available to be issued.

### Note 2 - Cash, Cash Equivalents and Investments

New York State investment statutes govern the Water Authority's investment policy. In addition, the Water Authority has its own investment policy that closely resembles New York State statutes. Water Authority monies must be deposited in Federal Deposit Insurance Corporation (FDIC) insured commercial banks or trust companies located within the State of New York. Permissible investments include demand accounts, certificates of deposit, and investment pools, obligations of the U.S. Treasury and U.S. agencies, repurchase agreements, and obligations of New York State or its localities.

The written investment policy requires repurchase agreements to be purchased from banks located within the State and that underlying securities must be obligations of the Federal government. Underlying securities must have a fair value of at least 105% of the cost of the repurchase agreement.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 2 - Cash, Cash Equivalents and Investments - Continued

Amounts have been deposited into various trust funds with a fiscal agent to satisfy legal covenants. Further, the amounts have been invested into various investments in compliance with the Water Authority's investment policy. Cash, cash equivalents and investments comprise the following:

	December 31, 2021	
	Cost	Fair Value
Non-interest bearing accounts		
Cash accounts	\$ 173,013	\$ 173,013
Bank deposits	1,592,481	1,592,481
Interest bearing and money market accounts		
Federated US Treasury Cash Reserves # 632	1,963,544	1,963,544
BNY Mellon Cash Reserve USD	40,220	40,220
Bank deposits	10,133,703	10,133,703
Total cash and cash equivalents	\$ 13,902,961	\$ 13,902,961
Investment in debt securities		
Dreyfus Gov't Securities CM 610	18,700,820	18,700,820
Certificates of Deposit	5,881,189	5,848,650
U.S. Treasury Bill	569,639	582,924
BOA Master Repurchase Agreement (matures on 4/1/2030)	787,219	787,219
US Treasury SLGS	287,700	287,700
Total investments	\$ 26,226,567	\$ 26,207,313

	December 31, 2020	
	Cost	Fair Value
Non-interest bearing accounts		
Cash accounts	\$ 804,026	\$ 804,026
Bank Deposits	840,483	840,483
Interest bearing and money market accounts		
Federated US Treasury Cash Reserves # 632	1,643,972	1,643,972
BNY Mellon Cash Reserve USD	1,698	1,698
Bank Deposits	11,545,206	11,545,206
Total cash and cash equivalents	\$ 14,835,385	\$ 14,835,385
Investment in debt securities		
Dreyfus Gov't Securities CM 610	24,019,269	24,019,271
Certificates of Deposit	2,216,398	2,239,869
U.S. Treasury Bill (BOA)	569,639	582,942
BOA Master Repurchase Agreement (matures on 4/1/2030)	787,219	787,219
US Treasury SLGS	287,700	287,700
Total investments	\$ 27,880,225	\$ 27,917,001

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 2 - Cash, Cash Equivalents and Investments - Continued

#### a. Fair Value Hierarchy

The framework for measuring fair value includes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3).

The three levels of inputs that may be used to measure fair value are as follows:

Level 1 - Inputs to the valuation methodology are unadjusted quoted prices for identical assets in active markets that the Water Authority has the ability to access.

Level 2 - Inputs to the valuation methodology include:

- Quoted prices for similar assets in active markets;
- Quoted prices for identical or similar assets in inactive markets;
- Inputs other than quoted prices that are observable for the asset;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset.

All debt securities held by the Water Authority fall within this category.

Level 3 - Inputs to the valuation methodology are unobservable inputs and significant to the fair value measurement.

The fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

Following is a description of the valuation methodologies used for assets measured at fair value at December 31, 2021 and 2020:

- *Dreyfus Government Securities and Repurchase Agreements*: Valued using matrix pricing techniques, including information from unaffiliated third parties.
- *Certificates of deposit*: Valued under a discounted cash flows approach that maximizes observable inputs, such as current yields of similar instruments, but includes adjustments for certain risks that may not be observable, such as credit and liquidity risks.
- *U.S. Treasury Bills*: Valued based on observable prices for the particular security, or when prices are not observable, the valuation is based on prices of comparable securities or the present value of expected future cash flows.
- *U.S. Treasury Bond State and Local Government Series*: The fair value is determined by the bond trustee, and cost approximates fair value.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 2 - Cash, Cash Equivalents and Investments - Continued

#### a. Fair Value Hierarchy - Continued

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Water Authority believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine that fair value of certain financial instrument could result in a different fair value measurement at the reporting date.

#### b. Interest Rate Risk

Interest rate risk is the risk that the value of investments will decrease as a result of a rise in interest rates.

Cash held under trust indentures or similar instruments governing the issue of bonds is invested only in the permitted investments specified in the indenture or similar instrument, primarily short-term. Also, investments held outside trust indentures or similar instruments are restricted to deposits in interest-bearing accounts secured by collateral obligations of the United States or the State of New York with a fair value of 105% of the amount on deposit.

The following is a specific list of the type of permitted investments and their maximum maturities:

<u>Permitted Investments</u>	<u>Maturity Maximum</u>
U.S. Treasuries, government obligations, commercial paper, tax-exempt obligations, bonds issued by federal agencies and money markets.	12 Years
Certificates of Deposit	5 Years

#### c. Credit Risk

Water Authority investment policy limits investments of funds to money markets, certificates of deposit, and repurchase agreements with appropriate collateral equal to 105% of the principal amount. Under the Water Authority's general revenue bond resolution, investment securities include government obligations guaranteed by the full faith and credit of the United States, bonds or notes issued by various federal institutions, interest-bearing or demand deposits, repurchase agreements, money market funds, commercial paper, and tax-exempt obligations rated A-3 or better. At December 31, 2021, investments in trustee accounts or through investment agreements as part of obligations held under the trust indenture or similar instrument are limited to treasury securities, repurchase agreements and certificates of deposit.

#### d. Custodial Credit Risk

Investments are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the government, and are held either by: (a) the counterparty; or (b) the counterparty's trust department or agent but not in the government's name. All of the Water Authority's investments are held under their name with the custodian.



# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 2 - Cash, Cash Equivalents and Investments - Continued

*e. Concentration of Credit Risk*

Concentration of credit risk is the risk of loss attributed to the Water Authority's investment in single issues. As of December 31, 2021, and 2020, the Water Authority had approximately 71.4% and 86.0%, respectively, of its investment portfolio invested in Dreyfus Government Securities CM 610, and 22.3% and 8.0%, respectively invested in certificate of deposits. No other issuer makes up more than 5% of the Water Authority's investment portfolio at December 31, 2021 or 2020.

### Note 3 - Restricted and Board Designated Assets

Excluding sewer and water service collections, substantially all of the restricted cash, cash equivalents and investments of the Water Authority are held by a Trustee in accordance with the provisions of Bond Resolutions and/or the Financing Agreement.

	December 31,			2020
	2021			
	Cash and Equivalents	Investments	Total	Total
Serial Bond Funds				
2000 Series	\$ 1,846,934	\$ 787,219	\$ 2,634,153	\$ 2,426,965
2001A Series	-	23,474	23,474	23,472
2001B Series	7,014	515,649	522,663	318,035
2012 Series	-	631,542	631,542	623,701
2015 Series	2,250	2,876,135	2,878,385	3,317,672
2016 Series	25,747	2,972,539	2,998,286	3,414,050
2020A Series	-	13,249,309	13,249,309	15,329,903
2020B Series	145,015	531,547	676,562	531,492
Total Serial Bond Funds	2,026,960	21,587,414	23,614,374	25,985,290
PILOT Payment Fund	108,847	-	108,847	1,457
R&I Fund	-	610,006	610,006	611,020
Promissory Note Fund	40,970	-	40,970	2,448
	149,817	610,006	759,823	614,925
Sewer and water services collections	1,970,456	-	1,970,456	1,759,352
Total	\$ 4,147,233	\$ 22,197,420	\$ 26,344,653	\$ 28,359,567

The following is a brief synopsis of the various trust funds:

*Serial Bond Fund*

Sinking Fund and Debt Service Reserve Fund

Various sinking funds and the debt service reserve funds are established to fulfill the debt service reserve requirements on the outstanding bonds as and when they become due and payable.

Construction Fund

Construction or Project funds are established to fund future construction projects and to acquire projects necessary to maintain or enhance the current water system.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 3 - Restricted and Board Designated Assets - Continued

#### Cost of Issuance Fund

Cost of issuance funds are established to pay for all legal, financial and other costs related to acquiring and maintaining various bond issues.

#### PILOT Payment Fund

The PILOT payment fund is established to hold funds payable to each municipality and school districts at the times and amounts determined pursuant to the legislation creating the Finance Authority and Water Authority.

#### Repair and Improvement Fund

The repair and improvement fund is established to fund repairs and improvements to the water system. The required deposit amount in this fund should be equal to the repair reserve requirement. The repair reserve requirement stipulates that funds should be used to make up deficiencies in the promissory note fund; to pay costs of constructing, acquiring, completing or restoring projects; the costs of renewals to or replacements of projects or extraordinary maintenance or repairs; to repay certain temporary loans incurred for projects; and to pay other debts and liabilities of the regional system, PILOT payments and debt service requirements.

#### Promissory Note Fund

The promissory note fund is established to hold funds payable to the City of Utica at the times and amounts determined pursuant to the promissory note agreement created when the Finance Authority and Water Authority bought the water system.

#### Sewer and Water Services Collections

The Water Authority bills and collects sewer charges imposed by Oneida County, the City of Utica, the Towns of Marcy and Westmoreland, and the Villages of Holland Patent, Bridgewater and Yorkville. In addition, billing and collection of water service charges assessed by the Village of Bridgewater (outside the Water Authority's service area) are conducted by the Water Authority. The amounts collected may consist of current and delinquent sewer or water charges.

The amounts owed to (due from) these other governments are as follows:

Local Government	December 31,	
	2021	2020
Oneida County Sewer	1,526,850	1,436,128
City of Utica Sewer	367,928	247,786
Village of Holland Patent	(4,649)	(4,292)
Town of Marcy Sewer	20,963	16,569
Town of Bridgewater	23,829	19,893
Town of Westmoreland	18,969	29,179
Village of Yorkville	13,599	10,408
Village of Oriskany	2,967	3,681
	\$ 1,970,456	\$ 1,759,352

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 3 - Restricted and Board Designated Assets - Continued

#### Board Designated Funds

The Board of Directors of the Water Authority has segregated portions of unrestricted assets to indicate tentative plans for future financial commitment and resource use. The strategy by the Board of Directors is to annually fund these programs to meet budgeted commitments. The use of these resources is determined by the Board based upon pre-determined occurrences or actions. The following is a list of these commitments:

Internal Commitments	December 31,	
	2021	2020
Debt service covenant	\$ 922,008	\$ 899,167
Repair, replacement and renewal reserve	840,135	837,584
Operating and maintenance reserve	1,427,576	1,164,581
Capital maintenance reserve	1,742,182	1,764,317
Reserve for Board projects	127,838	127,838
	\$ 5,059,739	\$ 4,793,487

### Note 4 - Utility Plant and Depreciation

#### *Utility Plant*

Activity for utility plant for the years ended December 31, 2021 and 2020 is summarized as follows:

	Balance 12/31/2020	Increases	Decreases	Balance 12/31/2021
Utility Plant, not being depreciated				
Water Rights & Other Intangible Assets	\$ 1,050,000	\$ -	\$ -	\$ 1,050,000
Land	981,806	-	-	981,806
Work In Progress	8,004,107	4,599,068	2,798,835	9,804,340
Total Utility Plant, not being depreciated	10,035,913	4,599,068	2,798,835	11,836,146
Utility Plant, being depreciated				
Water Transmission and Storage	37,724,830	744,505	-	38,469,335
Distribution	42,748,157	912,600	-	43,660,757
Vehicle and Maintenance Equipment	4,623,518	519,105	290,372	4,852,251
Office and Lab Equipment	3,194,900	48,949	-	3,243,849
Water Treatment	24,073,043	36,723	-	24,109,766
Total Utility Plant, being depreciated	112,364,448	2,261,882	290,372	114,335,958
Less Accumulated Depreciation for:				
Water Transmission and Storage	(7,630,816)	(736,137)	-	(8,366,953)
Distribution	(14,358,629)	(1,003,967)	-	(15,362,596)
Vehicle and Maintenance Equipment	(2,764,101)	(349,096)	289,486	(2,823,711)
Office and Lab Equipment	(2,496,252)	(84,775)	-	(2,581,027)
Water Treatment	(7,328,054)	(514,146)	-	(7,842,200)
Total Accumulated Depreciation	(34,577,852)	(2,688,121)	289,486	(36,976,487)
Total Utility Plant, being depreciated, net	77,786,596	(426,239)	579,858	77,359,471
Total Utility Plant, net	\$ 87,822,509	\$ 4,172,829	\$ 3,378,693	\$ 89,195,617

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 4 - Utility Plant and Depreciation

#### Utility Plant - Continued

Depreciation charged to expense for the years ended December 31, 2021 and 2020 was \$2,688,100 and \$2,678,500, respectively.

	Balance 12/31/2019	Increases	Decreases	Balance 12/31/2020
Utility Plant, not being depreciated				
Water rights and other intangible assets	\$ 1,050,000	\$ -	\$ -	\$ 1,050,000
Land	981,806	-	-	981,806
Work in progress	4,120,399	5,372,797	1,489,089	8,004,107
Total utility plant, not being depreciated	<u>6,152,205</u>	<u>5,372,797</u>	<u>1,489,089</u>	<u>10,035,913</u>
Utility plant, being depreciated				
Water transmission and storage	37,555,587	169,243	-	37,724,830
Distribution	42,373,161	374,996	-	42,748,157
Vehicle and maintenance equipment	4,318,751	304,767	-	4,623,518
Office and lab equipment	3,085,237	109,663	-	3,194,900
Water treatment	24,073,043	-	-	24,073,043
Total utility plant, being depreciated	<u>111,405,779</u>	<u>958,669</u>	<u>-</u>	<u>112,364,448</u>
Less accumulated depreciation for				
Water transmission and storage	(6,902,356)	(728,460)	-	(7,630,816)
Distribution	(13,326,480)	(1,032,149)	-	(14,358,629)
Vehicle and maintenance equipment	(2,437,398)	(326,703)	-	(2,764,101)
Office and lab equipment	(2,410,577)	(85,675)	-	(2,496,252)
Water treatment	(6,814,587)	(513,467)	-	(7,328,054)
Total accumulated depreciation	<u>(31,891,398)</u>	<u>(2,686,454)</u>	<u>-</u>	<u>(34,577,852)</u>
Total utility plant, being depreciated, net	<u>79,514,381</u>	<u>(1,727,785)</u>	<u>-</u>	<u>77,786,596</u>
Total utility plant, net	<u>\$ 85,666,586</u>	<u>\$ 3,645,012</u>	<u>\$ 1,489,089</u>	<u>\$ 87,822,509</u>

### Note 5 - Long-Term Liabilities

Long-term liabilities as of December 31, 2021 and 2020 are as follows:

	Balances at December 31, 2020	New Issues/ Additions	Reductions, Refundings and/or Payments	Balances at December 31, 2021	Due Within One Year	Long-Term Portion
Revenue bonds	\$ 55,865,000	\$ -	\$ (2,610,000)	\$ 53,255,000	\$ 2,485,000	\$ 50,770,000
Capital appreciation bonds	4,513,820	-	(628,026)	3,885,794	658,318	3,227,476
Premiums	4,066,355	-	(320,011)	3,746,344	309,530	3,436,814
Promissory note	4,896,820	-	(192,561)	4,704,259	203,893	4,500,366
Total bonds and notes payable	<u>\$ 69,341,995</u>	<u>\$ -</u>	<u>\$ (3,750,598)</u>	<u>\$ 65,591,397</u>	<u>\$ 3,656,741</u>	<u>\$ 61,934,656</u>
Capital leases	\$ 227,513	\$ -	\$ (83,697)	\$ 143,816	\$ 85,663	\$ 58,153
Compensated absences	559,555	265,799	(335,000)	490,354	335,000	155,354
Net pension liability	3,541,913	-	(3,528,712)	13,201	-	13,201
Accretion on capital appreciation bonds	9,275,881	791,928	(1,376,974)	8,690,835	1,571,531	7,119,304
Other postemployment benefits liability	5,043,138	674,469	(460,155)	5,257,452	-	5,257,452
Total other liabilities	<u>\$ 18,648,000</u>	<u>\$ 1,732,196</u>	<u>\$ (5,784,538)</u>	<u>\$ 14,595,658</u>	<u>\$ 1,992,194</u>	<u>\$ 12,603,464</u>

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 5 - Long-Term Liabilities - Continued

	Balances at December 31, 2019	Additions	Reductions	Balances at December 31, 2020	Due Within One Year	Long-Term Portion
Revenue bonds	\$ 44,515,000	\$ 25,875,000	\$ (14,525,000)	\$ 55,865,000	\$ 2,610,000	\$ 53,255,000
Capital appreciation bonds	4,513,820	-	-	4,513,820	628,026	3,885,794
Premiums	1,970,193	2,317,059	(220,897)	4,066,355	308,047	3,758,308
Promissory note	5,078,680	-	(181,860)	4,896,820	192,561	4,704,259
<b>Total bonds and notes payable</b>	<b>\$ 56,077,693</b>	<b>\$ 28,192,059</b>	<b>\$ (14,927,757)</b>	<b>\$ 69,341,995</b>	<b>\$ 3,738,634</b>	<b>\$ 65,603,361</b>
Capital leases	\$ 309,288	\$ -	\$ (81,775)	\$ 227,513	\$ 83,697	\$ 143,816
Compensated absences	490,128	404,427	(335,000)	559,555	335,000	224,555
Net pension liability	1,038,805	3,182,102	(678,994)	3,541,913	-	3,541,913
Accretion on capital appreciation bonds	8,526,964	748,917	-	9,275,881	1,376,974	7,898,907
Other postemployment benefits liability	6,102,303	510,050	(1,569,215)	5,043,138	-	5,043,138
<b>Total other liabilities</b>	<b>\$ 16,467,488</b>	<b>\$ 4,845,496</b>	<b>\$ (2,664,984)</b>	<b>\$ 18,648,000</b>	<b>\$ 1,795,671</b>	<b>\$ 16,852,329</b>

General revenue bonds, capital appreciation bonds and the promissory note outstanding as of December 31, 2021 and 2020 are as follows:

	Interest Rate or Approximate Yield	December 31, 2020 Balance	Issuance/ Additions	Refundings, Reductions and/or Payments	December 31, 2021 Balance	Due Within One Year
General revenue bonds						
2001 Series B*	3.02% - 5.31%	\$ 640,000	\$ -	\$ (170,000)	\$ 470,000	\$ 470,000
2012 Series	3.00% - 4.00%	1,470,000	-	(720,000)	750,000	750,000
2015 Series	2.87% - 5.00%	20,535,000	-	(1,320,000)	19,215,000	865,000
2016 Series	2.00% - 5.00%	7,345,000	-	(255,000)	7,090,000	270,000
2020 Series A	4.00%	14,920,000	-	-	14,920,000	-
2020 Series B	0.52% - 2.37%	10,955,000	-	(145,000)	10,810,000	130,000
Unamortized general revenue bond premiums		4,053,900	-	(318,767)	3,735,133	308,284
Total general revenue bonds and unamortized premiums		59,918,900	-	(2,928,767)	56,990,133	2,793,284
Capital appreciation bonds						
2000 Series	5.80% - 5.87%	4,513,820	-	(628,026)	3,885,794	658,318
Unamortized capital appreciation bond premiums		12,455	-	(1,244)	11,211	1,246
Total capital appreciation bonds and unamortized premiums		4,526,275	-	(629,270)	3,897,005	659,564
City of Utica Promissory Note	5.80%	4,896,820	-	(192,561)	4,704,259	203,893
<b>Total general revenue bonds, capital appreciation bonds and City of Utica Promissory Note</b>		<b>\$ 69,341,995</b>	<b>\$ -</b>	<b>\$ (3,750,598)</b>	<b>\$ 65,591,397</b>	<b>\$ 3,656,741</b>

\*--The Environmental Facilities Corporation (EFC) refinanced the 2001A and 2001B bond issues on behalf of the Water Authority as part of larger refunding transactions at the State level. The resulting savings from these refinancings will be passed on to the Water Authority in the form of additional subsidies to the existing debt service. The existing principal and interest amounts for the EFC bonds will remain as established under their original agreements.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 5 - Long-Term Liabilities - Continued

	Interest Rate or Approximate Yield	December 31, 2019 Balance	Issuance/ Additions	Refundings, Reductions and/or Payments	December 31, 2020 Balance	Due Within One Year
General revenue bonds						
2001 Series A*	3.43% - 5.13%	\$ 1,810,000	\$ -	\$ (1,810,000)	\$ -	\$ -
2001 Series B*	3.02% - 5.31%	805,000	-	(165,000)	640,000	170,000
2012 Series	3.00% - 4.00%	12,395,000	-	(10,925,000)	1,470,000	720,000
2015 Series	2.87% - 5.00%	21,780,000	-	(1,245,000)	20,535,000	1,320,000
2016 Series	2.00% - 5.00%	7,725,000	-	(380,000)	7,345,000	255,000
2020 Series A	4.00%	-	14,920,000	-	14,920,000	-
2020 Series B	0.52% - 2.37%	-	10,955,000	-	10,955,000	145,000
Unamortized general revenue bond premiums		1,956,489	2,317,060	(219,649)	4,053,900	306,804
Total general revenue bonds and unamortized premiums		<u>46,471,489</u>	<u>28,192,060</u>	<u>(14,744,649)</u>	<u>59,918,900</u>	<u>2,916,804</u>
Capital appreciation bonds						
2000 Series	5.80% - 5.87%	4,513,820	-	-	4,513,820	628,026
Unamortized capital appreciation bond premiums		13,703	-	(1,248)	12,455	1,244
Total capital appreciation bonds and unamortized premiums		<u>4,527,523</u>	<u>-</u>	<u>(1,248)</u>	<u>4,526,275</u>	<u>629,270</u>
City of Utica Promissory Note	5.80%	<u>5,078,681</u>	<u>-</u>	<u>(181,861)</u>	<u>4,896,820</u>	<u>192,560</u>
Total general revenue bonds, capital appreciation bonds and City of Utica Promissory Note		<u>\$ 56,077,693</u>	<u>\$ 28,192,060</u>	<u>\$ (14,927,758)</u>	<u>\$ 69,341,995</u>	<u>\$ 3,738,634</u>

\*--The Environmental Facilities Corporation (EFC) refinanced the 2001A and 2001B bond issues on behalf of the Water Authority as part of larger refunding transactions at the State level. The resulting savings from these refinancings will be passed on to the Water Authority in the form of additional subsidies to the existing debt service. The existing principal and interest amounts for the EFC bonds will remain as established under their original agreements.

#### *Advance Refundings/ Defeasance of Debt*

During November 2020, the Finance Authority issued \$14,920,000 of Series 2020A revenue bonds to provide for various capital projects currently underway and future projects for improvement of the water system. In addition, during November 2020, the Finance Authority issued \$10,955,000 of Series 2020B revenue refunding bonds to refund the majority of the existing 2012 Series bonds for a net present value savings of \$454,575.

#### *General Revenue Bonds*

The debt service requirements for the Finance Authority's general revenue bonds as of December 31, 2021 is as follows:

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 5 - Long-Term Liabilities - Continued

#### General Revenue Bonds - Continued

For the year ending December 31,	Principal	Interest	Total
2022	\$ 2,485,000	\$ 1,803,384	\$ 4,288,384
2023	2,590,000	1,706,033	4,296,033
2024	2,670,000	1,612,888	4,282,888
2025	2,770,000	1,515,400	4,285,400
2026	2,880,000	1,409,770	4,289,770
2027 through 2031	15,450,000	5,545,535	20,995,535
2032 through 2036	9,060,000	3,599,239	12,659,239
2037 through 2041	6,940,000	2,317,750	9,257,750
2042 through 2046	8,410,000	838,800	9,248,800
	53,255,000	20,348,799	73,603,799
Unamortized Premiums	3,735,133	-	3,735,133
	<u>\$ 56,990,133</u>	<u>\$ 20,348,799</u>	<u>\$ 77,338,932</u>

#### Capital Appreciation Bonds

The Finance Authority has \$3,885,794 and \$4,513,820 in Series 2000 capital appreciation bonds outstanding at December 31, 2021 and 2020, respectively. Capital appreciation bonds pay no current interest but accrete interest from the date of issuance to the date of maturity. A summary of the Finance Authority's capital appreciation bonds and debt service requirements as of December 31, 2021 is as follows:

Maturity Date	Approximate Yield	December 31, 2021		December 31, 2020	
		Original Principal	Amount due at Maturity	Original Principal	Amount due at Maturity
April 1, 2021	5.800%	\$ -	\$ -	\$ 628,026	\$ 2,005,000
April 1, 2022	5.810%	658,318	2,229,849	658,318	2,229,849
April 1, 2023	5.820%	620,319	2,230,000	620,319	2,230,000
April 1, 2024	5.830%	584,416	2,230,000	584,416	2,230,000
April 1, 2025	5.840%	550,476	2,230,000	550,476	2,230,000
April 1, 2026	5.850%	518,408	2,230,000	518,408	2,230,000
April 1, 2027	5.860%	487,008	2,225,000	487,008	2,225,000
April 1, 2028	5.860%	113,630	550,000	113,630	550,000
April 1, 2029	5.870%	96,263	495,000	96,263	495,000
April 1, 2030	5.870%	256,956	1,400,000	256,956	1,400,000
		3,885,794	15,819,849	4,513,820	17,824,849
Unamortized Premiums		11,211	-	12,455	-
		<u>\$ 3,897,005</u>	<u>\$ 15,819,849</u>	<u>\$ 4,526,275</u>	<u>\$ 17,824,849</u>

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 5 - Long-Term Liabilities - Continued

#### *Capital Appreciation Bonds - Continued*

Capital appreciation bonds are presented at their maturity value, less the unaccreted appreciation. Unaccreted appreciation represents the difference between the maturity value of the capital appreciation bonds, and their par value. The unaccreted appreciation is accreted as interest expense over the life of the capital appreciation bonds. The accretion on capital appreciation bonds is reported as a component of other liabilities in these combined financial statements.

Estimated future accretion of capital appreciation bonds is as follows:

For the year ending December 31,

2022	\$	723,440
2023		637,908
2024		547,084
2025		450,692
2026		348,411
2027 through 2030		524,474
	<b>\$</b>	<b>3,232,009</b>

#### *Promissory Note*

The debt service requirements for the Finance Authority's promissory note as of December 31, 2021 is as follows:

For the year ending December 31,	Principal	Interest	Total
2022	\$ 203,893	\$ 276,822	\$ 480,715
2023	215,891	264,824	480,715
2024	228,595	252,120	480,715
2025	242,046	238,669	480,715
2026	256,290	224,425	480,715
2027 through 2031	1,526,220	877,355	2,403,575
2032 through 2036	2,031,324	372,251	2,403,575
	<b>\$ 4,704,259</b>	<b>\$ 2,506,466</b>	<b>\$ 7,210,725</b>

#### *Bond Covenants*

Financing agreements relating to all the current and future bonding contain various covenants pertaining to the use and maintenance of the trust funds established from the proceeds of each bonding. For the years ended December 31, 2021 and 2020, the Water Authority was in compliance with the covenants. The following is a summary of the covenants:

- (1) The Water Authority is required to establish and collect rates, fees and charges sufficient to be at least equal to the sum of:
  - i. 115% of the estimated aggregate debt service and projected debt service payable in that fiscal year; and
  - ii. 100% of operating expenses, accrued promissory note payments, PILOT payments, Finance Authority expenses and any other required deposits for the year.



# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 5 - Long-Term Liabilities - Continued

#### *Bond Covenants - Continued*

- (2) The Water Authority has reviewed the adequacy of fees, rates and charges at least annually.
- (3) The Water Authority has enforced the payment of any and all amounts owed for the use of the regional system. Likewise, the Board has enforced amounts delinquent at year-end as a lien against the property.
- (4) The Water Authority has not furnished or supplied any product, use or service of the regional system free of charge or at nominal charge to any person, firm or corporation, public or private, except any municipality in pursuit of its governmental function.
- (5) The Water Authority's expenses for the month of December were paid, and there were no shortfalls.
- (6) The debt service reserve fund includes separate amounts for each series of bonds issued. The required amount maintained in the fund equals the debt service reserve requirement.
  - i. The debt service reserve requirement is the lesser of the maximum annual debt service over the bond's life, 125% of the average annual debt service or the maximum amount allowed without jeopardizing the tax-exempt status of the bonds.
- (7) Initial funding for the repair and improvement fund in the amount of \$500,000 (currently \$610,000) was received from the purchase of the water system. These funds may be used for the following:
  - i. To pay all or any part of the cost of constructing, acquiring, completing or restoring projects;
  - ii. To pay the cost of renewals to or replacements of projects or to pay the cost of extraordinary maintenance or repairs or repay all or any part of the temporary loans;
  - iii. To pay for the cost incurred for the purpose of acquiring or constructing projects, renewals and replacements or extraordinary maintenance and repairs; and
  - iv. To pay other debts and liabilities of the regional system not otherwise provided for, any PILOT payments and payment of debt service requirements.
- (8) The debt service and sinking fund balance is equal to the accrued debt service.
- (9) The promissory note fund is at least equal to the accrued promissory note payment.
- (10) The PILOT payments fund is at least equal to the required PILOT payments and any shortfall from previous months.
- (11) The repair and improvement fund deposit amounts, if any, are specified in the annual budget to meet monthly requirements, including any shortfalls from preceding months.
- (12) The Water Authority transferred the amount, if any, remaining in the general account, to the bond redemption and accumulated surplus fund at the end of the year.
- (13) The Water Authority will make available funds to pay all required subordinated indebtedness.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 6 - Deferred Outflows of Resources

A summary of deferred outflows of resources outstanding at year end is as follows:

	December 31,	
	2021	2020
Amounts deferred on defeasance of debt		
Series 2020 Bonds	\$ 539,491	\$ 585,081
Series 2016 Bonds	187,311	200,083
Series 2015 Bonds	1,269,155	1,397,917
Series 2012 Bonds	22,236	44,472
Water Authority financing costs		
Bond insurance	116,286	122,032
	2,134,479	2,349,585
Pension resources	3,638,816	2,998,785
Other postemployment benefits	467,559	247,856
	\$ 6,240,854	\$ 5,596,226

Bond insurance premiums are amortized to interest expense over the life of the bonds using the effective interest method.

The amounts deferred on the defeasance of debt are amortized to interest expense over the shorter of the life of the defeased debt or the new debt issued. Amortization of deferred amounts totaled approximately \$209,400 and \$171,400 for years ended December 31, 2021 and 2020, respectively.

### Note 7 - Employees' Pension Plan

#### *Plan Description and Benefits Provided*

The Water Authority participates in the New York State and Local Employees' Retirement System (System), a cost-sharing multiple-employer retirement system. The System provides retirement benefits as well as death and disability benefits. The net position of the System is held in the New York State Common Retirement Fund (Fund), which was established to hold all net assets and record changes in plan net position allocated to the System. The Comptroller of the State of New York serves as the trustee of the Fund and is the administrative head of the System. The Comptroller of the State of New York serves as the Trustee of the Fund and is the administrative head of the System. The Comptroller is an elected official determined in a direct state-wide election and serves a four-year term. System benefits are established under the provisions of the New York State Retirement and Social Security Law (NYSRSSL). Once a public employer elects to participate in the System, the election is irrevocable. The New York State Constitution provides that pension membership is a contractual relationship, and plan benefits cannot be diminished or impaired. Benefits can be changed for future members only by enactment of a State statute.

The Water Authority also participates in the Public Employees' Group Life Insurance Plan (GLIP), which provides death benefits in the form of life insurance. The System is included in the State's financial report as a pension trust fund. That report, including information with regard to benefits provided, may be found at [www.osc.state.ny.us/retire/publications/index.php](http://www.osc.state.ny.us/retire/publications/index.php) or obtained by writing to the New York State and Local Retirement System, 110 State Street, Albany, New York 12244.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 7 - Employees' Pension Plan - Continued

#### *Plan Description and Benefits Provided - Continued*

The System is noncontributory except for employees who joined after July 27, 1976, who contribute 3.0 percent of their salary for the first ten years of membership, and employees who joined on or after January 1, 2010 who generally contribute 3.0 percent of their salary for their entire length of service. The average contribution rate for the System's fiscal year ended March 31, 2021 and 2020, was approximately 14.6% and 14.9% of payroll, respectively. Under the authority of the NYSRSSL, the Comptroller annually certifies the actuarially determined rates expressly used in computing the employers' contributions based on salaries paid during the Systems' fiscal year ended March 31. Water Authority contributions for the current year and two preceding years were equal to 100 percent of the required contributions and were as follows:

<u>Operating Year</u>	<u>Actual Contributions</u>	<u>Percentage of Covered Payroll</u>
December 31, 2021	\$ 793,108	15.78%
December 31, 2020	\$ 678,994	13.82%
December 31, 2019	\$ 664,194	14.35%

#### *Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions*

At December 31, 2021 and 2020, the Water Authority reported a liability of approximately \$13,000 and \$3,542,000, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of March 31, 2021, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Water Authority's proportion of the net pension liability was based on a projection of the Water Authority's long-term share of contributions to the pension plan relative to the projected contributions of all participating members, actuarially determined.

At December 31, 2021 and 2020, the Water Authority's proportion was 0.013257% and 0.0133755%, respectively.

For the years ended December 31, 2021 and 2020, the Water Authority recognized pension expense of approximately \$369,000 and \$1,267,100, respectively, and reported deferred outflows and inflows of resources related to pensions from the following sources:

	<u>2021</u>		<u>2020</u>	
	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 161,214	\$ -	\$ 208,456	\$ -
Changes of assumptions	2,427,150	45,777	71,317	61,581
Net differences between projected and actual investment earnings on pension plan investments	-	3,791,967	1,815,757	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	257,345	97,582	224,261	129,107
Water Authority contributions subsequent to the measurement date	793,107	-	678,994	-
Total	<u>\$ 3,638,816</u>	<u>\$ 3,935,326</u>	<u>\$ 2,998,785</u>	<u>\$ 190,688</u>

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 7 - Employees' Pension Plan - Continued

*Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions - Continued*

Water Authority contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ending December 31, 2022. Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ending December 31,		
2022	\$	(171,601)
2023		(40,625)
2024		(170,987)
2025		(706,404)
		<u>(706,404)</u>
Total	\$	<u>(1,089,617)</u>

*Actuarial Assumptions*

The total pension liability at March 31, 2021 and 2020 was determined by using an actuarial valuation as of April 1, 2021 and 2020, respectively, with updated procedures used to roll forward the total pension liability to March 31, 2021 and 2020. The actuarial valuation used the following actuarial assumptions. The assumptions were used in both valuations, except as noted.

Actuarial cost method	Entry age normal
Inflation Rate	2.7 percent (2021), 2.5 percent (2020)
Salary Scale	4.4 percent, indexed by service (2021) 4.2 percent, indexed by service (2020)
Investment rate of return, including inflation	5.9 percent compounded annually, net of expenses (2021) 6.8 percent compounded annually, net of expenses (2020)
Cost of Living Adjustment	1.4 percent (2021), 1.3 percent (2020)
Decrement	Based on FY 2015-2020 experience (2021) Based on FY 2010-2015 experience (2020)
Mortality improvement	System Experience and Society of Actuaries

The long term expected rate of return on pension plan investments was determined using a building block method in which best estimate ranges of expected future real rates of return (expected returns net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of March 31, 2021 are summarized below.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 7 - Employees' Pension Plan - Continued

#### *Actuarial Assumptions - Continued*

Asset Type	Target Allocation	Long-Term Expected Real Rate
Domestic equity	32.00%	4.05%
International equity	15.00%	6.30%
Private equity	10.00%	6.75%
Real estate	9.00%	4.95%
Opportunistic portfolio and absolute return strategies	3.00%	4.50%
Credit	4.00%	3.63%
Real assets	3.00%	5.95%
Fixed income	23.00%	0.00%
Cash	1.00%	0.50%
	100.00%	

#### *Discount Rate*

The discount rate used to calculate the total pension liability as of December 31, 2021 was 5.9 percent. The projection of cash flows used to determine the discount rate assumes that contributions from plan members will be made at the current contribution rates and that contributions from employers will be made at statutorily required rates, actuarially. Based upon the assumptions, the System's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

#### *Sensitivity of the Proportionate Share of the Net Pension Liability to the Discount Rate Assumption*

The following presents the Water Authority's proportionate share of the net pension liability at December 31, 2021 calculated using the discount rate of 5.9 percent, as well as what the Water Authority's proportionate share of the net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage-point higher than the current rate:

	1% Decrease (4.9%)	Current Discount (5.9%)	1% Increase (6.9%)
Water Authority's proportionate share of the net pension liability (asset)	\$ 3,663,954	\$ 13,201	\$ (3,353,649)

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 7 - Employees' Pension Plan - Continued

*Sensitivity of the Proportionate Share of the Net Pension Liability to the Discount Rate Assumption - Continued*

The components of the current-year net pension liability of the employers as of March 31, 2021 and 2020 were as follows (in thousands):

	2021	2020
Employers' total pension liability	\$ 220,680,157	\$ 194,596,261
Plan net position	(220,580,583)	(168,115,682)
Employers' net pension liability	\$ 99,574	\$ 26,480,579
 Ratio of plan net position to the employers' total pension liability	 99.95%	 86.39%

### Note 8 - Deferred Compensation Plan

In 2007, the Water Authority entered into an agreement with the New York Deferred Compensation Board to provide a Deferred Compensation Plan in accordance with the Internal Revenue Code, Section 457, on a voluntary basis to full-time employees. The Water Authority's fiduciary responsibilities are to submit participant payroll deductions and enrollment changes to the plan administrator. Twenty-seven (27) employees contributed to the plan during both of the years ended December 31, 2021 and 2020.

### Note 9 - Other Postemployment Benefits (OPEB)

In addition to the retirement benefits described in Note 8, the Water Authority provides postemployment health insurance coverage to its retired employees and their survivors in accordance with the provisions of the employment contract negotiated between the Board and its employee groups. Substantially all employees may become eligible for these benefits if they reach normal retirement age while working for the Water Authority.

*Plan Description*

More specifically, a small group of retirees and their survivors are afforded health insurance as a supplement to Medicare for life. All other retirees and their survivors are provided a number of years of health insurance premium payments based on their years of service to the Water Authority.

The Water Authority pays 100% of the cost of premiums to insurance companies that provide the health care coverage. Healthcare benefits for non-bargaining employees are similar to those of union employees.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 9 - Other Postemployment Benefits (OPEB) - Continued

#### *Plan Description - Continued*

The number of participants as of December 31, 2021, the effective date of the annual OPEB valuation, follows:

Actives not eligible to retire	49
Actives eligible to retire	31
Retired and surviving spouses	18
Retiree spouses covered	9
	9
Total	107

#### *Funding Policy*

The Water Authority currently pays for postemployment health care benefits on a pay-as-you-go basis. Premiums paid by the Water Authority on behalf of current retirees and their spouses totaled \$460,155 and \$422,065 for the years ended December 31, 2021 and 2020, respectively.

#### *Actuarial Assumptions, Methods and Definitions*

The total OPEB liability for the Water Authority's years ended December 31, 2021 and 2020 were measured as of September 30, 2020, using an actuarial valuation as of that date. The total OPEB liability as of September 30, 2020 actuarial valuation was calculated using the following actuarial assumptions:

#### *Actuarial Assumptions, Methods and Definitions*

Discount rate	
December 31, 2021 measurement date	2.19%
December 31, 2020 measurement date	2.41%
Healthcare cost trend	Society of Actuaries Getzen Long-Term Healthcare Cost Trend Resource Model v2022 version f4 (Updated October 30, 2021)
Mortality rates	Pub-2010 Public Retirement Plans Mortality Tables, Headcount-Weighted, distinct for Teachers, General, and Safety, without separate Contingent Survivor mortality for active members, and service and deferred annuitants and beneficiaries.
Termination rates	2003 Society of Actuaries small plan withdrawal

Actuarial assumptions involve estimates and assumptions about the probability of events far into the future and are subject to continual revisions as actual results are compared to past experiences and new estimates are made about the future. These calculations are designed to reduce short-term volatility in actuarial accrued liabilities. Projected benefits are based on the types of benefits provided at the time of each valuation and on the cost sharing provisions then in effect.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 9 - Other Postemployment Benefits (OPEB) - Continued

#### *Changes in the OPEB Liability*

	2021	2020
Total OPEB Liability as of January 1st	\$ 5,043,138	\$ 6,102,303
Service costs	133,002	135,912
Interest	113,655	159,944
Change of benefit terms	-	83,879
Differences between expected and actual experience	374,903	(1,147,150)
Changes in assumptions or other inputs	52,909	130,315
Benefit payments	(460,155)	(422,065)
Net change in OPEB liability	214,314	(1,059,165)
Total OPEB liability as of December 31st	\$ 5,257,452	\$ 5,043,138

The following presents the OPEB liability of the Water Authority as of December 31, 2021, as well as what the Water Authority's net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current discount rate:

	1% Decrease 1.19%	Current Discount 2.19%	1% Increase 3.19%
Other postemployment benefits liability	\$5,656,954	\$5,257,452	\$4,905,876

The following presents the OPEB liability of the Water Authority as of December 31, 2021, as well as what the Water Authority's net OPEB liability would be if it were calculated using a healthcare cost rate that is one percentage point lower or one percentage point higher than the current healthcare cost rate:

	1% Decrease	Healthcare Cost Trend Rate	1% Increase
Other postemployment benefits liability	\$4,838,303	\$5,257,452	\$5,744,345

#### *OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB*

The Authority recognized OPEB expense of \$674,500 and \$510,000 for the years ended December 31, 2021 and 2020, respectively. The Water Authority reported deferred outflows and deferred inflows of resources related to OPEB at December 31, 2021 and 2020 as follows:

	2021		2020	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between actual and expected experience	\$ 283,463	\$ 656,564	\$ 1,667	\$ 1,033,736
Changes in assumptions or other inputs	184,096	19,464	246,189	76,814
Total	\$ 467,559	\$ 676,028	\$ 247,856	\$ 1,110,550



# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 9 - Other Postemployment Benefits (OPEB) - Continued

#### *OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB - Continued*

Amounts reported as deferred outflows and deferred inflows of resources related to the OPEB liability will be recognized as expense as follows:

	<u>Projected Amortization Amounts</u>
Year ending December 31,	
2022	\$ (158,431)
2023	(140,016)
2024	79,546
2025	<u>10,432</u>
Total	<u>\$ (208,469)</u>

### Note 10 - Commitments and Contingencies

#### *a. Litigation*

In the normal course of operations, the Water Authority is subject to claims for damages. When all information regarding the claim has been received, the Board members determine whether to settle or allow a lawsuit. The Water Authority maintains a policy of recording damages when they are probable and able to be estimated.

#### *b. Labor Relations*

Substantially all of the Water Authority's employees are members of one of two labor unions. The International Brotherhood of Teamsters, Local Union 182, (Teamsters) represents the office staff, operations staff, field labor staff and foremen. The Management Employees Association represents the remainder of the represented employees. The agreement with the Management Employees Association expired effective March 31, 2020; however, the terms of the agreement continue to be recognized by the Water Authority and members of the Management Employees Association. The Teamsters contract expired effective December 31, 2021; however, the terms of the agreement continue to be recognized by the Water Authority and members of the Teamsters.

#### *c. Risk Management*

The Water Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; and natural disasters for which the organization carries commercial insurance. The Water Authority participates in a risk management pool for workers' compensation. Premiums are paid to the carrier based upon the percent of associated risk within the pool and is used to pay claims, claim reserves and administrative costs of the program.

Settlements for insurance claims and workers' compensation claims have not exceeded coverage.

# Mohawk Valley Water Authority

## Notes to Combined Financial Statements December 31, 2021 and 2020

### Note 10 - Commitments and Contingencies - Continued

#### d. Lease Commitments

The Water Authority entered into a noncancelable 30-year operating lease for office space. Future minimum rental payments required under the operating lease as of December 31, 2021, are as follows:

Year ending December 31,	
2022	\$ 104,870
2023	104,870
2024	104,870
2025	104,870
2026	104,870
Total	<u>\$ 524,350</u>

#### e. Construction Commitments

At December 31, 2021, the amounts of unexpended commitments for projects undertaken and the detail by type of contract are as follows:

Tanks, transmission mains, technology and design	<u>\$ 6,729,352</u>
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## Mohawk Valley Water Authority

### Required Supplementary Information Schedule of Other Postemployment Benefits Liability

	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
Total OPEB Liability as of January 1st	\$ 5,043,138	\$ 6,102,303	\$ 6,024,440	\$ 6,500,459	\$ 6,226,929
Service costs	133,002	135,912	136,250	155,606	154,491
Interest	113,655	159,944	219,583	219,315	186,357
Change of benefit terms	-	83,879	-	-	453,409
Differences between expected and actual experience	374,903	(1,147,150)	(138,808)	(285,851)	14,987
Changes in assumptions or other inputs	52,909	130,315	288,283	(175,180)	(165,801)
Benefit payments	<u>(460,155)</u>	<u>(422,065)</u>	<u>(427,445)</u>	<u>(389,909)</u>	<u>(369,913)</u>
Net change in OPEB liability	<u>214,314</u>	<u>(1,059,165)</u>	<u>77,863</u>	<u>(476,019)</u>	<u>273,530</u>
Total OPEB liability as of December 31st	<u>\$ 5,257,452</u>	<u>\$ 5,043,138</u>	<u>\$ 6,102,303</u>	<u>\$ 6,024,440</u>	<u>\$ 6,500,459</u>
Covered employee payroll	5,026,155	4,912,579	4,759,329	4,759,329	4,823,330
Total OPEB liability as a percentage of covered employee payroll	104.60%	102.66%	128.22%	126.58%	134.77%

*Schedule is intended to show information for ten years. Additional years will be displayed as they become available.*

## Mohawk Valley Water Authority

### Required Supplementary Information Schedule of Pension Contributions

	December 31 Year End								March 31 Year End		
	2021	2020	2019	2018	2017	2016	2015	2014	2014	2013	2012
Contractually required contributions	\$ 793,108	\$ 678,994	\$ 664,194	\$ 688,946	\$ 716,479	\$ 720,801	\$ 878,511	\$ 859,755	\$ 1,004,985	\$ 897,364	\$ 665,564
Contributions in relation to the contractually required contribution	793,108	678,994	664,194	688,946	716,479	720,801	878,511	859,755	1,004,985	897,364	665,564
Contribution deficiency (excess)	-	-	-	-	-	-	-	-	-	-	-
Covered employee payroll	5,026,155	4,912,579	4,629,526	4,759,329	4,823,330	4,753,978	4,820,101	4,672,582	4,696,192	4,773,213	4,621,972
Contributions as a percentage of covered employee payroll	15.78%	13.82%	14.35%	14.48%	14.85%	15.16%	18.23%	18.40%	21.40%	18.80%	14.40%

See Independent Auditor's Report.

## Mohawk Valley Water Authority

### Required Supplementary Information Schedule of the Proportionate Share of the Net Pension Liability

	December 31,						
	2021	2020	2019	2018	2017	2016	2015
Water Authority's proportion of the net pension liability	\$ 13,201	\$ 3,541,913	\$ 1,038,805	\$ 530,144	\$ 1,548,077	\$ 2,771,980	\$ 562,489
Water Authority's proportionate share of the net pension liability	0.0132570%	0.0133755%	0.0146614%	0.0164261%	0.0164755%	0.0172706%	0.0166503%
Water Authority's covered-employee payroll	5,026,155	\$ 4,912,579	\$ 4,629,526	\$ 4,759,329	\$ 4,823,330	\$ 4,753,978	\$ 4,820,101
Water Authority's proportion of the net pension liability (asset) as a percentage of its covered-employee payroll	0.26%	72.10%	22.44%	11.14%	32.10%	58.31%	11.67%
Plan fiduciary net position as a percentage of total pension liability	99.95%	86.39%	96.27%	98.20%	94.70%	90.70%	97.20%

*Schedule is intended to show information for ten years. Additional years will be displayed as they become available.*



**Report on Internal Control Over Financial Reporting and on Compliance  
and Other Matters Based on an Audit of Financial Statements Performed In  
Accordance With Government Auditing Standards**

Members of the Board  
Mohawk Valley Water Authority  
Albany, New York

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the combined financial statements of the Mohawk Valley Water Authority and the Upper Mohawk Valley Regional Water Finance Authority (collectively the "Authority"), as of and for the year ended December 31, 2021, and the related notes to the combined financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated March 29, 2022.

**Report on Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

*A deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

**Report on Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

**Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

BST+Co.CPAs, LLP

Albany, New York  
March 29, 2022



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**Form of Continuing Disclosure Certificate**

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## APPENDIX G

### Form of Continuing Disclosure Certificate

\$[\_\_\_\_\_]
UPPER MOHAWK VALLEY REGIONAL
WATER FINANCE AUTHORITY
WATER SYSTEM REVENUE BONDS, SERIES 2023 (GREEN BONDS)

#### ANNUAL CONTINUING DISCLOSURE UNDERTAKING

This Annual Continuing Disclosure Undertaking (this “Undertaking”), dated as of [\_\_\_\_], 2023, is executed and delivered by the Upper Mohawk Valley Regional Water Finance Authority (the “Authority”) in connection with the execution and delivery of the Upper Mohawk Valley Regional Water Finance Authority’s (Oneida and Herkimer Counties, New York) Water System Revenue Bonds, Series 2023 (Green Bonds) (the “Bonds”). The Bonds are being executed and delivered pursuant to the terms of the Water System General Revenue Bond Resolution, adopted on December 1, 1996 (the “General Resolution”), as supplemented by a supplemental resolution of the Authority authorizing the Bonds (said Resolution, as heretofore supplemented and as so supplemented, the “Resolution”). The Authority hereby covenants and agrees as follows:

**A. Purpose of Agreement.** This Undertaking is being executed and delivered by the Authority for the benefit of the Owners and Beneficial Owners of the Bonds and in order to assist the Underwriter in complying with the Rule.

**B. Definitions.** As used in this Undertaking, the following terms have the meanings ascribed to such terms below:

“Financial Obligation” means, for purposes of the events set out in paragraph D(15) and D(16), a (i) debt obligation; (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (iii) guarantee of (i) or (ii). The term “Financial Obligation” shall not include municipal securities (as defined in the Securities Exchange Act of 1934, as amended) as to which a final official statement (as defined in the Rule) has been provided to the MSRB consistent with the Rule.

“MSRB” means the Municipal Securities Rulemaking Board.

“Rule” means SEC Rule 15c2-12, as amended from time to time.

“SEC” means the United States Securities and Exchange Commission.

“Undertaking” means this Annual and Continuing Disclosure Undertaking.

**C. Annual Reports.** The Authority shall provide annually to the MSRB, (1) within six months after the end of each fiscal year ending after the date hereof, material historical financial and operating data concerning the Regional System and the Revenues of the Regional System generally of the type found in the Authority’s Official Statement dated [\_\_\_\_], 2023 (the “Official Statement”) under the captions “FINANCE AUTHORITY DEBT SERVICE REQUIREMENTS,” “THE REGIONAL SYSTEM” (excluding the information under the subcaption “Leakage and Non-Revenue Water Use”) and “FINANCIAL OPERATIONS” (excluding the information under the subcaption “Current Water Rates”)

and (2) if not provided as part such financial information and operating data, financial statements of the Authority, when and if available. Any financial statements so to be provided shall be prepared in accordance with the accounting principles as the Authority may be required to employ from time to time pursuant to state law or regulation, and shall be audited, if the Authority commissions an audit of such statements and the audit is completed within the period during which they must be provided.

If the Authority changes its fiscal year, it will notify the MSRB of the change (and of the date of the new fiscal year end) prior to the next date by which the Authority otherwise would be required to provide financial information and operating data pursuant to this Undertaking.

The financial information and operating data to be provided pursuant to this Undertaking may be set forth in full in one or more documents or may be included by specific reference to any document available to the public on the MSRB's Internet Web site or filed with the SEC.

**D. *Event Notices.*** The Authority shall provide notice of any of the following events with respect to the Bonds to the MSRB in a timely manner and not more than 10 business days after occurrence of the event:

- (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-exempt status of the Bonds, or other material events affecting the tax status of the Bonds;
- (7) Modifications to rights of holders of the Bonds, if material;
- (8) Bond calls, if material, and tender offers;
- (9) Defeasances;
- (10) Release, substitution, or sale of property securing repayment of the Bonds, if material;
- (11) Rating changes;
- (12) Bankruptcy, insolvency, receivership, or similar event of the Authority, which shall occur as described below;
- (13) The consummation of a merger, consolidation, or acquisition involving the Authority or the sale of all or substantially all of its assets, other than in the ordinary course of business, the entry into of 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;

(14) Appointment of a successor or additional trustee or the change of name of a trustee, if material;

(15) Incurrence of a Financial Obligation of the Authority, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Authority, any of which affect security holders; or

(16) Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the Authority, any of which reflect financial difficulties.

For these purposes, any event described in the immediately preceding paragraph (12) is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent, or similar officer for the Authority in a proceeding under the United States Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Authority, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement, or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Authority.

The Authority intends to comply with the Listed Events described in Section 5(a)(10) and Section 5(b)(8), and the definition of “Financial Obligation” in Section 1, with reference to the Rule, any other applicable federal securities laws and the guidance provided by the SEC in Release No. 34-83885 dated August 20, 2018 (the “2018 Release”), and any further amendments or written guidance provided by the SEC or its staff with respect to the amendments to the Rule effected by the 2018 Release.

The Authority shall notify the MSRB, in a timely manner, of any failure by the Authority to provide financial information or operating data in accordance with this Undertaking by the time required by this Undertaking.

**E. *Filings with the MSRB.*** All financial information, operating data, financial statements, notices, and other documents provided to the MSRB in accordance with this Undertaking shall be provided in an electronic format prescribed by the MSRB and shall be accompanied by identifying information as prescribed by the MSRB.

**F. *Limitations, Disclaimers, and Amendments.*** The Authority shall be obligated to observe and perform the covenants specified in this Undertaking for so long as, but only for so long as, the Authority remain an “obligated person” with respect to the Bonds within the meaning of the Rule.

The provisions of this Undertaking are for the sole benefit of the holders and beneficial owners of the Bonds, and nothing in this Undertaking, express or implied, shall give any benefit or any legal or equitable right, remedy, or claim hereunder to any other person. The Authority undertakes to provide only the financial information, operating data, financial statements, and notices which it has expressly agreed to provide pursuant to this Undertaking and does not hereby undertake to provide any other information that may be relevant or material to a complete presentation of the Authority’s financial results, condition, or prospects or hereby undertake to update any information provided in accordance with this Undertaking or otherwise, except as expressly provided herein. The Authority does not make any representation or warranty concerning such information or its usefulness to a decision to invest in or sell Bonds at any future date.

UNDER NO CIRCUMSTANCES SHALL THE AUTHORITY BE LIABLE TO THE HOLDER OR BENEFICIAL OWNER OF ANY BOND OR ANY OTHER PERSON, IN CONTRACT OR TORT, FOR DAMAGES RESULTING IN WHOLE OR IN PART FROM ANY BREACH BY THE ISSUER, WHETHER NEGLIGENT OR WITH OR WITHOUT FAULT ON ITS PART, OF ANY COVENANT SPECIFIED IN THIS UNDERTAKING, BUT EVERY RIGHT AND REMEDY OF ANY SUCH PERSON, IN CONTRACT OR TORT, FOR OR ON ACCOUNT OF ANY SUCH BREACH SHALL BE LIMITED TO AN ACTION FOR MANDAMUS OR SPECIFIC PERFORMANCE.

No default by the Authority in observing or performing its obligations under this Undertaking shall constitute a breach of or default on the Bonds.

Nothing in this Undertaking is intended or shall act to disclaim, waive, or otherwise limit the duties of the Authority under federal and state securities laws.

The provisions of this Undertaking may be amended by the Authority from time to time to adapt to changed circumstances that arise from a change in legal requirements, a change in law, or a change in the identity, nature, status, or type of operations of the Authority, but only if (1) the provisions of this Undertaking, as so amended, would have permitted an underwriter to purchase or sell Bonds in the primary offering of the Bonds in compliance with the Rule, taking into account any amendments or interpretations of the Rule to the date of such amendment, as well as such changed circumstances, and (2) either (a) the holders of the Bonds consent to such amendment or (b) a person that is unaffiliated with the Authority (such as nationally recognized bond counsel) determines that such amendment will not materially impair the interests of the holders and beneficial owners of the Bonds. The Authority may also repeal or amend the provisions of this Undertaking if the SEC amends or repeals the applicable provisions of the Rule or any court of final jurisdiction enters judgment that such provisions of the Rule are invalid, and the Authority also may amend the provisions of this Undertaking in its discretion in any other manner or circumstance, but in either case only if and to the extent that the provisions of this sentence would not have prevented an underwriter from lawfully purchasing or selling Bonds in the primary offering of the Bonds, giving effect to (a) such provisions as so amended and (b) any amendments or interpretations of the Rule. If the Authority so amends the provisions of this Undertaking, the Authority shall include with any amended financial information or operating data next provided in accordance with this Undertaking an explanation, in narrative form, of the reasons for the amendment and of the impact of any change in the type of financial information or operating data so provided.

Dated: [\_\_\_\_], 2023

UPPER MOHAWK VALLEY REGIONAL  
WATER FINANCE AUTHORITY

By: \_\_\_\_\_  
Vincent J. Gilroy, Jr.  
Chairperson

UPPER MOHAWK VALLEY REGIONAL WATER BOARD  
AGREEMENT TO PROVIDE CONTINUING DISCLOSURE  
UNDER SEC RULE 15C2-12

This Agreement (the “Agreement”), dated [\_\_\_\_\_], 2023, is made by and between the Upper Mohawk Valley Regional Water Finance Authority (the “Authority”), a body corporate and politic constituting a public benefit corporation of the State of New York (the “State”) and the Upper Mohawk Valley Regional Water Board (the “Board”), a body corporate and politic constituting a corporate municipal instrumentality of the State.

In connection with the issuance from time to time by the Authority of its Bonds, notes, or other evidence of indebtedness (collectively, the “Bonds”) the parties hereto, in consideration of the mutual covenants herein contained and other good and lawful consideration, hereby agree as follows:

1. Obligation of the Board to Provide Continuing Disclosure. If and when requested by a representative of the Authority, the Board shall timely provide, or cause to be timely provided, to such representative, any requested information pertaining to the Board, including without limitation, historical financial and operating data, that, in the reasonable judgment of the Authority, is required to be provided by the Authority pursuant to the terms of the continuing disclosure undertakings it enters into from time to time in connection with the sale of its Bonds (the “Undertaking”).

2. Remedies. If the Board shall fail to comply with any provision of this Agreement, the Authority may enforce by mandamus or other suit or proceeding at law or in equity, this Agreement against the Board or any of its officers, agents and employees, and may compel the Board or any such officers, agents or employees to perform and carry out their duties under this Agreement; provided, however, the sole and exclusive remedy for breach of this Agreement shall be an action to compel specific performance of the Board’s obligations hereunder.

3. Termination. This Agreement shall remain in full force and effect until the earlier of: (i) the Board is no longer deemed to be an “obligated person” as defined in Rule 15c2-12 of the Securities and Exchange Commission, as the same be may be amended from time to time (the “Rule”) or (ii) all principal, redemption premiums, if any, and interest on the Bonds shall have been paid in full or the Bonds shall have otherwise been paid or defeased pursuant to the terms and conditions of the documents under which such Bonds were issued; provided, however, that if the undertaking shall be amended, modified or changed so that all or any part of the information currently required to be provided thereunder shall no longer be required to be provided thereunder, then such information shall no longer be required to be provided hereunder, and provided, further, that if and to the extent the Rule (or successor provision), or any provision thereof, shall be declared by a court of competent and final jurisdiction to be, in whole or in part, invalid, unconstitutional, null and void, or otherwise inapplicable to the Bonds, then the information required to be provided hereunder, in so far as it was required to be provided by a provision of the Rule so declared, shall no longer be required to be provided hereunder.

4. Parties in Interest. This Agreement is executed and delivered solely for the benefit of the Authority. No other person shall have any right to enforce the provisions hereof or any other rights thereunder.

5. Governing Law. THIS AGREEMENT SHALL BE GOVERNED BY; THE LAWS OF THE STATE OF NEW YORK DETERMINED WITHOUT REGARD TO PRINCIPLES OF CONFLICT OF LAW.

Terms used but not otherwise defined herein shall have the meanings ascribed thereto in the Official Statement.

IN WITNESS WHEREOF, the undersigned have duly authorized, executed and delivered this Agreement as of the date first above written.

UPPER MOHAWK VALLEY REGIONAL  
WATER FINANCE AUTHORITY

By: \_\_\_\_\_  
Vincent J. Gilroy, Jr.,  
Chairperson

UPPER MOHAWK VALLEY REGIONAL  
WATER BOARD:

By: \_\_\_\_\_  
Elis J. DeLia, Esq.  
Chairperson





