

NEW ISSUE--BOOK-ENTRY ONLY

See "RATINGS" herein.

In the opinion of Bond Counsel, subject to compliance with certain covenants, under existing law and except as described under "TAX MATTERS" herein, interest on the Series 2016 Bonds is excluded from gross income for federal income tax purposes, and the Series 2016 Bonds and the interest thereon are exempt from taxation by the State of Michigan or by any taxing authority within the State of Michigan, except estate taxes and taxes on gains realized from the sale, payment or other disposition of the Series 2016 Bonds. See "TAX MATTERS."



\$917,805,000
GREAT LAKES WATER AUTHORITY
Water Supply System Revenue and Revenue Refunding Bonds
Series 2016

\$88,000,000
Water Supply System Revenue Senior Lien Bonds
Series 2016A

\$443,930,000
Water Supply System Revenue Refunding Senior Lien Bonds
Series 2016C

\$163,830,000
Water Supply System Revenue Second Lien Bonds
Series 2016B

\$222,045,000
Water Supply System Revenue Refunding Second Lien Bonds
Series 2016D

Dated: Date of Delivery

Due as shown on inside cover page

The Water Supply System Revenue and Revenue Refunding Bonds set forth above (collectively, the "Series 2016 Bonds") will be issued by the Great Lakes Water Authority (the "Authority" or "GLWA") pursuant to the Bond Ordinance (as defined herein) of the Authority to (i) refund certain Refunded Bonds (as defined herein), (ii) pay certain costs of improvements, enlargements, extensions and repairs to the Regional Water System and Local Water System (each as defined herein), and (iii) pay certain costs of issuance of the Series 2016 Bonds. The Series 2016 Bonds are payable from the Pledged Assets (as defined herein) pledged as security therefor under the Bond Ordinance. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2016 BONDS."

Effective on January 1, 2016 the Authority began operating the regional water supply and sewage disposal systems previously operated by the City of Detroit (the "City"). The Authority assumed all of the then outstanding debt of the City relating to the regional and local water supply and sewage disposal systems and acquired all of the revenues of those systems. The Series 2016 Bonds are the inaugural public offering of bonds by the Authority. See "THE GREAT LAKES WATER AUTHORITY."

The Series 2016 Bonds will be issued in fully registered form in denominations of \$5,000 or any integral multiple thereof and will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York, which will act as securities depository for the Series 2016 Bonds. Bondholders will not receive certificates representing their ownership interest in the Series 2016 Bonds purchased. See "THE SERIES 2016 BONDS - Book-Entry-Only System."

The Series 2016 Bonds will bear interest at the rates and mature on the dates as set forth on the inside cover hereof. Interest on the Series 2016 Bonds will accrue from the date of delivery thereof and will be payable January 1 and July 1, commencing January 1, 2017.

The Series 2016 Bonds are subject to optional and mandatory redemption prior to maturity. See "THE SERIES 2016 BONDS – Optional Redemption" and "- Mandatory Redemption."

The scheduled payment of principal of and interest on the Series 2016D Bonds maturing on July 1, 2033 (CUSIP No. 39081JBC1) (the "Insured Bonds") when due will be guaranteed under an insurance policy to be issued concurrently with the delivery of the Series 2016 Bonds by Assured Guaranty Municipal Corp.



The Trustee for the Series 2016 Bonds is U.S. Bank National Association.

The Series 2016 Bonds are issued under Act 233 and Act 94 (each as defined herein). The Series 2016 Bonds are not a general obligation of the Authority and do not constitute indebtedness of the Authority within any constitutional or statutory limitation, but are payable, both as to principal and interest solely from the Pledged Assets of the Water System (as defined herein). The payment of the principal of and interest on the Series 2016 Bonds is secured by a statutory lien on the Pledged Assets as described herein.

By purchasing the Series 2016 Bonds, the original and all subsequent purchasers of the Series 2016 Bonds shall be deemed to have consented to the Reserve Fund Amendment (as defined herein). See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2016 BONDS – Reserve Fund Amendment."

The Series 2016 Bonds are offered when, as and if issued by the Authority and received by the Underwriters, subject to prior sale, withdrawal or modification of the offer without notice, and subject to approval of legality by Bond Counsel to the Authority, Dickinson Wright PLLC, Detroit, Michigan. Certain legal matters will be passed upon by Kutak Rock LLP, Washington, D.C., counsel to the Underwriters. It is expected that the Series 2016 Bonds in book-entry form will be available for delivery against payment therefor through the facilities of The Depository Trust Company ("DTC") on or about October 27, 2016.

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

Citigroup

Goldman, Sachs & Co.

Barclays

J.P. Morgan

Morgan Stanley

Siebert Cisneros Shank & Co., LLC

Ramirez & Co., Inc.

Wells Fargo Securities

Dated: October 14, 2016

\$88,000,000

**Water Supply System Revenue Senior Lien Bonds
Series 2016A**

\$88,000,000; 5.00%; Term Bond Due July 1, 2046; Yield 3.34%*; CUSIP† 39081JAA6

\$163,830,000

**Water Supply System Revenue Second Lien Bonds
Series 2016B**

\$163,830,000; 5.00%; Term Bond Due July 1, 2046; Yield 3.49%*; CUSIP† 39081JAB4

\$443,930,000

**Water Supply System Revenue Refunding Senior Lien Bonds Series 2016C
Serial Bonds**

<u>Maturity (July 1)</u>	<u>Principal Amount</u>	<u>Interest Rate</u>	<u>Yield</u>	<u>CUSIP†</u>
2022	\$4,865,000	5.00%	1.82%	39081JAR9
2023	23,380,000	5.00%	1.95%	39081JAC2
2024	5,325,000	5.00%	2.11%	39081JAD0
2025	25,290,000	5.00%	2.25%	39081JAE8
2026	17,385,000	5.00%	2.38%	39081JAF5
2027	20,110,000	5.00%	2.51%*	39081JAG3
2028	39,855,000	5.00%	2.65%*	39081JAH1
2029	18,025,000	5.00%	2.76%*	39081JAJ7
2030	19,640,000	5.00%	2.87%*	39081JAK4
2031	48,860,000	5.00%	2.96%*	39081JAL2
2032	62,395,000	5.00%	3.02%*	39081JAM0
2033	30,915,000	5.00%	3.07%*	39081JAN8
2033	36,000,000	5.25%	2.97%*	39081JBF4
2034	17,775,000	5.25%	3.02%*	39081JAP3
2035	43,380,000	5.00%	3.16%*	39081JAQ1
2035	30,730,000	5.25%	3.06%*	39081JAS7

\$222,045,000

**Water Supply System Revenue Refunding Second Lien Bonds Series 2016D
Serial Bonds**

<u>Maturity (July 1)</u>	<u>Principal Amount</u>	<u>Interest Rate</u>	<u>Yield*</u>	<u>CUSIP†</u>
2024	\$1,480,000	5.00%	2.26%	39081JAT5
2025	1,505,000	5.00%	2.40%	39081JAU2
2026	1,680,000	5.00%	2.53%	39081JAV0
2027	2,680,000	5.00%	2.66%*	39081JAW8
2028	2,705,000	5.00%	2.80%*	39081JAX6
2029	3,365,000	5.00%	2.91%*	39081JAY4
2030	25,900,000	5.00%	3.02%*	39081JAZ1
2031	27,200,000	5.00%	3.11%*	39081JBA5
2032	28,560,000	4.00%	3.47%*	39081JBB3
2033 [‡]	40,380,000	4.00%	3.40%*	39081JBC1
2035	1,205,000	5.00%	3.31%*	39081JBD9
2036	85,385,000	5.00%	3.34%*	39081JBE7

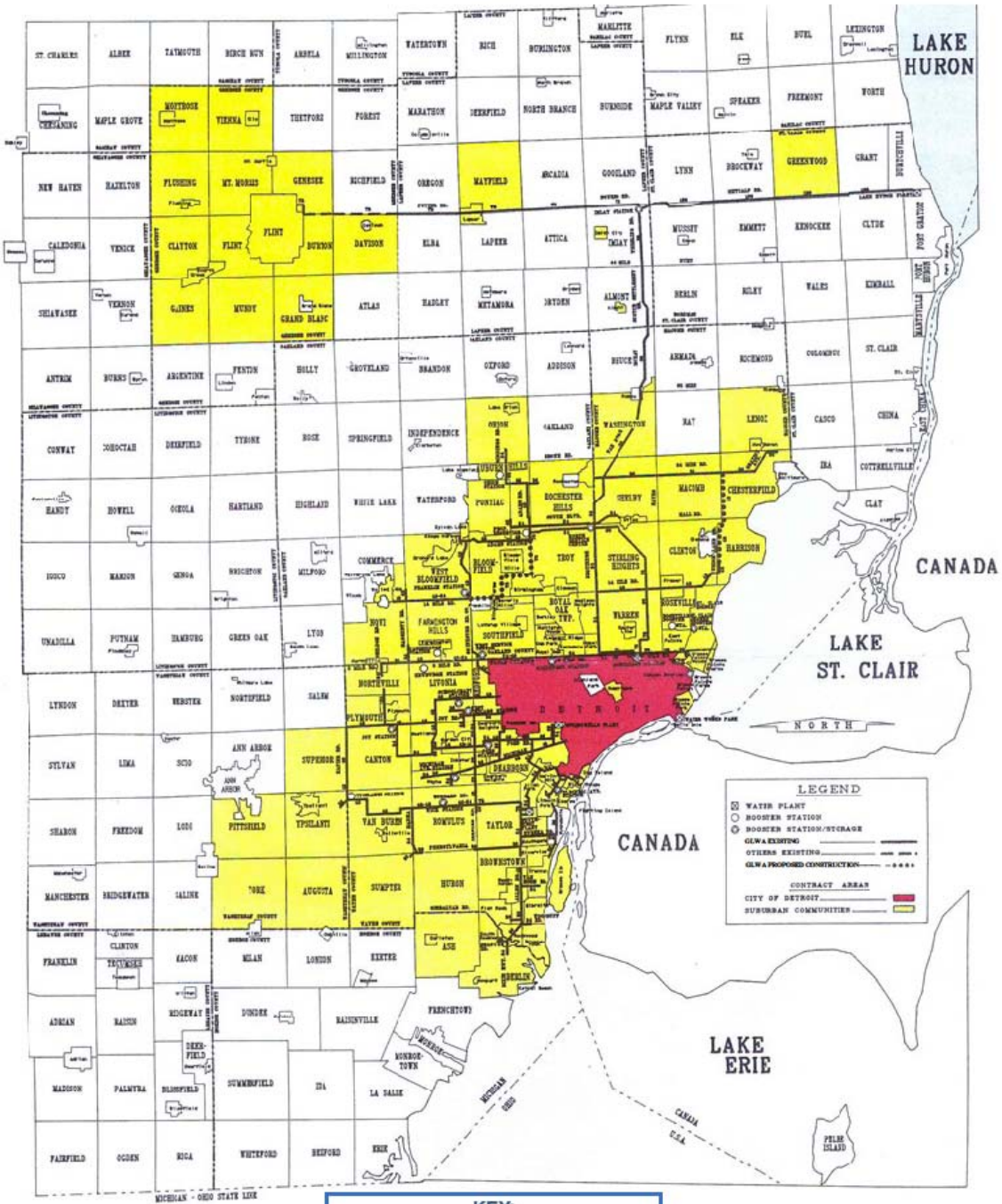
† Registered trademark of American Bankers Association. CUSIP data herein is provided by Standard and Poor's CUSIP Service Bureau, a division of the McGraw Hill Companies, Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP service. CUSIP numbers are provided for reference only. Neither the Authority, the Trustee nor the Underwriters take any responsibility for the accuracy of such numbers.

* Yield to first optional redemption date of July 1, 2026.

‡ Maturity insured by Assured Guaranty Municipal Corp.



Water Service Area



IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVERALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICES OF THE SERIES 2016 BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

THE UNDERWRITERS MAY OFFER AND SELL THE SERIES 2016 BONDS TO CERTAIN DEALERS AND DEALER BANKS ACTING AS AGENT AT PRICES LOWER THAN THE PUBLIC OFFERING PRICES STATED ON THE COVER OF THIS OFFICIAL STATEMENT. SUCH PUBLIC OFFERING PRICES MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS.

No dealer, broker, salesperson or other person has been authorized by the Authority or the Underwriters to make any representation other than as contained in this Official Statement and, if given or made, such other information or representation must not be relied upon as having been authorized by the Authority or the Underwriters. The information set forth in this Official Statement has been obtained from the Authority, the Detroit Water and Sewerage Department (“DWSD”), The Depository Trust Company (“DTC”), Assured Guaranty Municipal Corp. (“AGM”) and other sources that are deemed to be reliable, but as to information from sources other than themselves, is not to be construed as a representation by the Authority, DWSD, DTC, AGM or the Underwriters respectively. Certain historical information in this Official Statement has been derived from information on the operations of DWSD prior to the start-up of the Authority. The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of the transaction, but the Underwriters do not guarantee the accuracy or completeness of such information. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement nor the sale of the Series 2016 Bonds shall under any circumstances create any implication that there has been no change in the affairs of the Authority, DWSD, DTC or AGM since the date of this Official Statement. None of the information contained in this Official Statement has been supplied or verified by the Trustee, and the Trustee make no representations, warranties or guarantee as to the accuracy or completeness of any information in this Official Statement.

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 2016 Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. This Official Statement is not to be construed as a contract or agreement between the Authority and the purchasers or holders of any of the Series 2016 Bonds.

IN MAKING AN INVESTMENT DECISION INVESTORS MUST RELY ON THEIR OWN EXAMINATION OF THE AUTHORITY AND THE TERMS OF THE OFFERING, INCLUDING THE MERITS AND RISKS INVOLVED. THESE SECURITIES HAVE NOT BEEN RECOMMENDED BY ANY FEDERAL OR STATE SECURITIES COMMISSION OR REGULATORY AUTHORITY. FURTHERMORE, THE FOREGOING AUTHORITIES HAVE NOT CONFIRMED THE ACCURACY OR DETERMINED THE ADEQUACY OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

Certain statements contained in this Official Statement, including in the Appendices hereto, reflect not historical facts but forecasts and “forward-looking statements.” Such forward-looking statements can be identified, in some cases, by the terminology used, such as “may,” “will,” “should,” “expects,” “intends,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential,” “illustrate,”

“example,” and “continue,” or the singular, plural, negative or other derivations of these or other comparable terms. Purchasers and holders of any of the Series 2016 Bonds should not place undue reliance on forward-looking statements. All forward-looking statements included in this Official Statement are based on information available to the Authority on the date hereof, and the Authority does not assume any obligation to update any such forward-looking statements. Actual results could differ materially from those discussed in such forward-looking statements.

The forward-looking statements included herein are necessarily based on various assumptions and estimates and are inherently subject to various risks and uncertainties, including, but not limited to, the risks and uncertainties described herein and risks and uncertainties relating to the possible invalidity of the underlying assumptions and estimates and possible changes or developments in geopolitical, military, social, economic, business, industry, market, legal or regulatory circumstances, and conditions or actions taken or omitted to be taken by third parties, including customers, suppliers, and business partners, and legislative, judicial, and other governmental authorities and officials. Any of such assumptions could be inaccurate, and the Authority cannot predict or assess the emergence and impact of new factors. Accordingly, actual results may vary from the projections, forecasts and estimates contained in this Official Statement and such variations may be material, which could affect the Authority’s ability to fulfill some or all of its obligations under the Series 2016 Bonds.

No party that has provided information for this Official Statement has any obligation to update or otherwise revise any projections, forecasts and estimates, including any revisions to reflect changes in conditions or circumstances arising after the date of this Official Statement, or to reflect the occurrence of unanticipated events.

All projections, forecasts, assumptions, expressions of opinions, estimates, and other forward-looking statements are expressly qualified in their entirety by the foregoing and the other cautionary statements set forth in this Official Statement.

AGM makes no representation regarding the Series 2016 Bonds or the advisability of investing in the Series 2016 Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented under the caption “BOND INSURANCE” and APPENDIX XII - SPECIMEN MUNICIPAL BOND INSURANCE POLICY.

SUMMARY DESCRIPTION

Selected information is presented in this Summary Description for the convenience of the reader. To make an informed investment decision regarding the Series 2016 Bonds, a prospective investor should read this entire Official Statement.

Issuer: The Great Lakes Water Authority (“GLWA” or the “Authority”) is the regional wholesale provider of water and sewer services in southeast Michigan. The Authority was incorporated by the Counties of Macomb, Oakland, and Wayne (the “Counties”) and the City of Detroit (the “City”) on November 26, 2014 pursuant to Act 233, Public Acts of Michigan, 1955, as amended (“Act 233”). Pursuant to Leases (as defined herein) that became effective on January 1, 2016, the Authority assumed possession and control of the regional assets of both the water supply and sewage disposal systems owned by the City, which were previously operated by the Detroit Water and Sewerage Department (“DWSD” or the “Department”). The City, acting through DWSD, will continue to manage and operate its own local retail water and sewer system infrastructure. The Leases assigned all revenues of both systems to the Authority for an initial term of 40 years and substituted GLWA for the City as the obligor on all outstanding debt obligations of the City related to the systems. See “THE GREAT LAKES WATER AUTHORITY.”

Service Area and Customer Relationships: The Authority’s Water System (as defined herein) is one of the largest in the United States, both in terms of water produced and population served. The Water System currently serves an area of 981 square miles located in eight Michigan counties and an estimated population of nearly 3.9 million or approximately 38% of Michigan’s population. Suburban customers comprise approximately 82% of the population served by the Authority, and the Retail Water Customers (as defined herein) comprise the remainder served by the Authority. See “SERVICE AREA AND CUSTOMERS.”

Wholesale Charges and Retail Rates: The Authority is authorized to establish rates, fees and charges for its water supply and sewage disposal services. Under the Water and Sewer Services Agreement, the City is appointed as agent of the Authority for setting retail rates and for billing, collecting and enforcing the collection of charges from Retail Water Customers. As agent of the Authority, the City, through the Board of Water Commissioners and without further approval by the City Council, is required to set retail rates to meet the revenue requirements for the City retail portion of the Water System. Under certain conditions, the Authority may terminate the City’s appointment. See “SERVICE AREA AND CUSTOMERS – Service Charges to Customers,” “THE DETROIT WATER AND SEWERAGE DEPARTMENT” and APPENDIX VII - SUMMARY OF THE WATER AND SEWER SERVICES AGREEMENT.

Purpose of the Series 2016 Bonds: The Series 2016 Bonds are the Authority’s inaugural public sale of Bonds (as defined herein) pursuant to the Bond Ordinance. The Series 2016 Bonds are being issued to generate approximately \$215 million of proceeds to finance regional water system capital improvements for the Authority, and approximately \$57 million of proceeds to finance local water capital system improvements for DWSD, and to refinance for savings certain Bonds assumed by the Authority from the City pursuant to the Leases. See “THE SERIES 2016 BONDS - Plan of Financing.”

Redemption of the Series 2016 Bonds: The Series 2016 Bonds maturing on and after July 1, 2027 are subject to optional redemption on and after July 1, 2026 at a redemption price of par. The Series 2016A Bonds and the Series 2016B Bonds are subject to mandatory sinking fund redemption prior to maturity. See “THE SERIES 2016 BONDS – Optional Redemption” and “– Mandatory Redemption.”

Pledged Security and Statutory Lien: The Series 2016 Bonds are payable from the Pledged Assets (as defined herein), which include the Net Revenues (as defined herein) of the Water System. The Authority has irrevocably pledged the Net Revenues of the Water System for payment of the Series 2016 Bonds. The payment of the principal of and interest on the Series 2016 Bonds are secured by a statutory lien on the Pledged Assets. The Series 2016 Bonds are not a general obligation of the Authority. See “SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2016 BONDS.”

Reserve Accounts and Reserve Requirements: The Reserve Requirement for Senior Lien Bonds currently is the lesser of (i) the Maximum Annual Debt Service (as defined herein) on all Senior Lien Bonds or (ii)

the maximum amount permitted by the Internal Revenue Code of 1986, as amended (the “Code”). The Reserve Requirement for Second Lien Bonds currently is the lesser of (i) the Maximum Annual Debt Service on all Second Lien Bonds or (ii) the maximum amount permitted by the Code. Pursuant to an amendment to the Bond Ordinance that would become effective if and when approved by the holders of a majority in principal amount of Bonds of each affected priority of lien, if the Authority attains Senior Lien ratings of “Aa3” or “AA-” or higher from at least two of Moody’s, S&P, and Fitch, respectively, the Authority may, but is not required to, reduce or eliminate the Reserve Requirements for Senior Lien Bonds or the Second Lien Bonds, as the case may be. By purchasing the Series 2016 Bonds, the original and all subsequent purchasers of the Series 2016 Bonds shall be deemed to have consented to such amendment. See “SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2016 BONDS – Reserve Fund Amendment.”

Parity Lien and Additional Bonds: The Series 2016 Bonds are of equal standing on parity with all other Bonds assumed, issued or to be incurred under the Bond Ordinance and secured by a first or second lien, as the case may be, on the Pledged Assets. The Authority may issue additional bonds on a parity with the Series 2016 Bonds and other Bonds upon satisfaction of certain tests, including a coverage test requiring that either Projected Net Revenues or Historical Net Revenues, as determined by GLWA, divided by Maximum Annual Debt Service for such priority of lien and any higher priority of lien equals or exceeds the Required Coverage of 120% for Senior Lien Bonds, 110% for Second Lien Bonds and 100% for SRF Junior Lien Bonds and Pension Junior Lien Bonds. See “SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2016 BONDS – Issuance of Additional Bonds” and APPENDIX VI - SUMMARY OF THE BOND ORDINANCE.

Rate Covenant: The Authority covenants to fix charges to produce amounts required under the Bond Ordinance, including amounts required to meet the Required Coverage of 120% for Senior Lien Bonds, 110% for Second Lien Bonds and 100% for SRF Junior Lien Bonds and Pension Junior Lien Bonds. See “SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2016 BONDS – Rate Covenant” and APPENDIX VI - SUMMARY OF THE BOND ORDINANCE.

Historical and Projected Debt Service Coverage: The table below shows the historical (Fiscal Years 2011 to 2016) and projected (Fiscal Years 2017 to 2021) coverage of debt service, presented on a rate covenant basis.

<u>Rate Covenant Debt Service Coverage (d)</u>					
Senior Lien Bonds	1.49	1.56	1.61	1.51	1.71
Senior and Second Lien Bonds	1.07	1.18	1.23	1.17	1.30
All Bonds, Including SRF Junior Lien	1.05	1.16	1.22	1.16	1.29
<u>Projected Debt Service Coverage</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Senior Lien Bonds	1.98	2.05	2.18	2.01	1.99
Senior and Second Lien Bonds	1.54	1.54	1.57	1.48	1.48
All Bonds, Including SRF Junior Lien	1.52	1.52	1.54	1.46	1.46

(1) Fiscal Years 2011-2015 are based on audited financial results. Fiscal Year 2016 is a preliminary estimate.

See “AUTHORITY FINANCIAL OPERATIONS - Summary of Historical Revenues and Expenses” and APPENDIX I – FEASIBILITY CONSULTANT’S REPORT.

Bond Insurance: The scheduled payment of the principal of and interest on the Series 2016D Bonds maturing on July 1, 2033 (CUSIP No. 39081JBC1) (the “Insured Bonds”) when due will be insured by a municipal bond insurance policy (the “AGM Policy”) to be issued by Assured Guaranty Municipal Corp. (“AGM”) simultaneously with the delivery of the Insured Bonds. See “BOND INSURANCE”.

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INTRODUCTION

The following introductory statement is subject in all respects to the more complete information set forth in this Official Statement. The descriptions and summaries of various documents hereinafter set forth do not purport to be comprehensive or definitive and are qualified in their entirety by reference to each document. Capitalized terms used in this Official Statement that are not otherwise defined herein have the meanings set forth in APPENDIX IV – DEFINITIONS.

This Official Statement, including the cover pages and the Appendices hereto, is provided to furnish information in connection with the offering by the Great Lakes Water Authority (the “Authority” or “GLWA”) of its \$88,00,000 Water Supply System Revenue Senior Lien Bonds, Series 2016A (the “Series 2016A Bonds”), \$163,830,000 Water Supply System Revenue Second Lien Bonds, Series 2016B (the “Series 2016B Bonds”), \$443,930,000 Water Supply System Revenue Refunding Senior Lien Bonds, Series 2016C (the “Series 2016C Bonds”) and \$222,045,000 Water Supply System Revenue Refunding Second Lien Bonds, Series 2016D (the “Series 2016D Bonds”, and collectively, with the Series 2016A Bonds, the Series 2016B Bonds and the Series 2016C Bonds, the “Series 2016 Bonds”).

Great Lakes Water Authority

GLWA was incorporated by the City of Detroit (the “City”) and the Counties of Macomb, Oakland and Wayne (the “Counties”) on November 26, 2014 pursuant to Act 233, Public Acts of Michigan, 1955, as amended (“Act 233”). At the time of GLWA’s incorporation, the City, through its Detroit Water and Sewerage Department (“DWSD” or the “Department”), was providing water supply services within and outside of the City through a water supply system (the “Water System” or “System”) and drainage and sewage disposal services within and outside of the City through a sewage disposal system (the “Sewer System”). On June 12, 2015, the City and GLWA executed a Regional Water System Lease (the “Lease”), a Regional Sewage Disposal System Lease (the “Sewer Lease” and together with the Lease, the “Leases”) and a Water and Sewer Services Agreement (the “Water and Sewer Services Agreement”), and as of December 1, 2015, the City and GLWA executed a Shared Services Agreement (the “Shared Services Agreement”). The foregoing agreements became effective on January 1, 2016 (the “Effective Date”), at which time GLWA, pursuant to the Lease, became responsible for the debt obligations of the City relating to the Water System, including the payment of all DWSD Water Bonds (as defined herein), through the substitution of GLWA for the City as the sole obligor on the DWSD Water Bonds, the assignment to GLWA of all of the revenues of the Water System, and the assumption by GLWA of the DWSD Water Bonds.

The Authority operates the Regional Water System and the Regional Sewer System (each as defined herein) for Southeast Michigan pursuant to the Leases and the Water and Sewer Services Agreement. The governance structure of the Authority gives suburban water and sewer customers a substantial collaborative role in the direction of one of largest water and wastewater utilities in the nation, while also providing the City’s local systems the benefits of the Authority’s regional strengths. While GLWA manages and controls all regional water and wastewater wholesale services, the City and the suburban customers retain control of local water and sewer services within their respective borders. The City also acts as agent of GLWA with respect to setting, billing, collecting and enforcing local retail charges. Prior to January 1, 2016, DWSD’s financial activities were largely governed by a series of federal court orders designed to separate the management of the regional water and sewer enterprises from local City control and to ensure environmental compliance. In contrast, GLWA is a legally independent, regional authority created pursuant to State law, governed by its own independent Board of Directors and primarily overseen, as to environmental matters, by the Michigan Department of Environmental Quality (“MDEQ”), as are all water and sewer service providers in the state, and the federal Environmental Protection Agency (“EPA”). See APPENDIX V – SUMMARY OF THE LEASE,

APPENDIX VII – SUMMARY OF THE WATER AND SEWER SERVICES AGREEMENT and
APPENDIX VIII – SUMMARY OF THE SHARED SERVICES AGREEMENT.

Purpose

The proceeds of the sale of the Series 2016 Bonds will be used (i) to refund certain Bonds identified in Schedule I attached hereto (the “Refunded Bonds”), (ii) to pay certain costs of improvements, enlargements, extensions and repairs to the Regional Water System and the Local Water System (the “2016 Project”), and (iii) to pay certain costs of issuance of the Series 2016 Bonds. See “THE SERIES 2016 BONDS – Sources and Uses of Funds for the Series 2016 Bonds.”

Authorization

The Series 2016 Bonds have been authorized and are being issued pursuant to the provisions of (i) Act 233 and Act 94, Public Acts of Michigan, 1933, as amended (“Act 94”), (ii) Master Bond Ordinance No. 2015-01 adopted by the GLWA Board (as hereinafter defined) on October 7, 2015, as amended (the “Bond Ordinance”), (iii) the Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in a Principal Amount not to Exceed \$1,134,000,000, adopted by the GLWA Board on August 10, 2016, as amended (the “2016 Series Ordinance”), and (vi) a Sale Order of the Chief Executive Officer of the Authority dated October 14, 2016 (the “2016 Sale Order,” and, collectively with the Bond Ordinance and the 2016 Series Ordinance, the “Ordinance”).

Security and Sources of Payment for the Series 2016 Bonds

The Authority has irrevocably pledged the revenues of the Water System, after provision is made for reasonable and necessary expenses of operation, maintenance and administration of the Water System (the “Net Revenues”), and the Pledged Assets (as defined herein, which includes the Net Revenues) for payment of the Series 2016 Bonds. Payment of the Series 2016 Bonds is also secured by a statutory lien on the Pledged Assets. The Series 2016 Bonds are of equal standing on parity with all other Bonds (as defined herein) assumed, issued or incurred under the Bond Ordinance and secured by a first or second lien, as the case may be, on the Pledged Assets. See “SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2016 BONDS.”

The Series 2016 Bonds are issued under Act 233 and Act 94. The Series 2016 Bonds are not a general obligation of the Authority and do not constitute indebtedness of the Authority within any constitutional or statutory limitation, but are payable, both as to principal and interest solely from the Pledged Assets of the Water System. The payment of the principal of and interest on the Series 2016 Bonds is secured by a statutory lien on the Pledged Assets as described herein.

Trustee

U.S. Bank National Association will serve as the Trustee (the “Trustee”) for the Series 2016 Bonds, and in such capacity will act as bond register and paying agent for the Series 2016 Bonds.

Availability of Documents

The descriptions and summaries of various Authority documents set forth in this Official Statement do not purport to be conclusive or definitive and reference is made to each such document for the complete details of all terms and conditions thereof. A summary of certain provisions of the Lease, Bond Ordinance, the Water and Sewer Services Agreement and the Shared Services Agreement are set

forth in Appendices V, VI, VII and VIII, respectively, attached hereto. All references herein to the Series 2016 Bonds and the Bond Ordinance, the 2016 Series Ordinance, the Lease, the Water and Sewer Services Agreement and the Shared Services Agreement are qualified in their entirety by such documents, copies of which are available on GLWA's website at www.glwater.org or from the Underwriters prior to the execution and delivery of the Series 2016 Bonds and thereafter may be examined or obtained at the expense of the person requesting the same at the corporate trust office of the Trustee.

THE GREAT LAKES WATER AUTHORITY

On November 26, 2014, GLWA was incorporated by the City and the Counties by approval of the GLWA Articles of Incorporation pursuant to Act 233. A copy of the Articles of Incorporation is available at www.glwater.org. GLWA was incorporated for the purpose of acquiring, owning, leasing, improving, enlarging, extending, financing, refinancing and operating the portion of the Water System (the "Regional Water System") that provides service to the wholesale customers thereof and the Retail Water Customers (as defined herein) up to the point of connection to the Local Water System (as defined herein) and the portion of the Sewer System (the "Regional Sewer System" and, together with the Regional Water System, the "Regional Systems") that provides service to the wholesale customers thereof and to the Retail Sewer Customers (as defined herein) up to the point of connection to the Local Sewer System (as defined herein). In furtherance of such purpose, on June 12, 2015, the City and the Authority entered into (i) the Lease, (ii) the Sewer Lease, and (iii) the Water and Sewer Services Agreement for the provision by GLWA of water supply and sewage disposal services to City Retail Customers (as defined herein). The Lease, the Sewer Lease and the Water and Sewer Services Agreement each became effective on the Effective Date.

On the Effective Date, GLWA assumed all of the City's obligations under the DWSD Water Bonds, including all of the obligations to make payments of principal of and interest on the DWSD Water Bonds. In acquiring the Leased Water Facilities (as defined herein) pursuant to the Lease, commencing on the Effective Date, GLWA also acquired for the term of the Lease, and the City absolutely and irrevocably assigned, transferred and conveyed to GLWA, and GLWA purchased and acquired from the City, (i) all of the City's right, title and interest in and to the Revenues (as defined herein), including the Retail Revenues (as defined herein), in existence on the Effective Date, and (ii) all of the City's right, title and interest in and to the Revenues, including Retail Revenues, derived from operation of the Water System on and after the Effective Date and through the end of the term of the Lease. Part of the consideration for the Lease will be a lease payment to the City of \$22,500,000 per year, to be funded from a portion of the common-to-all revenue requirements for the Regional Water System. See APPENDIX V – SUMMARY OF THE LEASE.

In January 2016, GLWA began operating the largest regional water authority in the State of Michigan. GLWA serves classes of customers ("Customers") including communities and districts that are served via wholesale source contracts and the Retail Water Customers served via the Water and Sewer Services Agreement. The new organization has adopted an unwavering commitment to its customers, known as "One Water," with a strong mission statement of customer collaboration and engagement: *"Through regional collaboration, GLWA strives to be the provider of choice dedicated to efficiently delivering the nation's best water and sewer service in partnership with our customers."*

In open partnership with its customers, GLWA is focused on innovation in its business practices, with a commitment to providing the highest quality product and services to current and future generations. In order to further affordability for water and sewer services, GLWA launched the first program of its kind in the State of Michigan, known as the Water Residential Assistance Program or "WRAP," to provide an ongoing funding source for assistance to residential customers throughout GLWA's service area.

GLWA's senior management team has operated the Water System and the Sewer System since 2012 and is continuing to optimize the organization through innovative job designs, lean business practices and the greater use of technology. These organizational optimization initiatives have already resulted in performance improvements in all aspects of Water System operations, from environmental compliance to customer satisfaction, and have materially improved the Water System's financial metrics and results. In 2016, GLWA has further enhanced its management team's capacity in areas such as Asset Management, Energy Efficiency, Planning and Research, and Innovation. GLWA continues on its path of performance improvement with a new focus on its role in the economic success and the public health and safety of the region it serves.

The Regional Water System has a long history of providing reliable service and water quality with the Great Lakes as its source and five water treatment plants, with capacity well in excess of current and projected demands. In light of this capacity, GLWA has undertaken plans to market water services to potential new wholesale customers, as well as to right-size its facilities for financial and operational optimization of the Regional Water System.

Powers of the Authority

GLWA is a public body corporate organized pursuant to the provisions of Act 233. In addition to this statutory authority, the governance for the Authority is found in its Articles of Incorporation, By-Laws, policies, and ordinances including but not limited to its bond ordinances. The Authority has both express powers and implied powers necessary to carry out its powers, duties, and responsibilities. The Authority's express powers include the following:

- The Authority is empowered through its Board of Directors (the "GLWA Board") to provide wholesale water and wastewater service to the service area. The six-member GLWA Board has the authority to execute contracts, set policy for the Authority, set service charges and set the revenue requirement for the Retail Customers.
- The GLWA Board is required to appoint an Audit Committee to "review the reports related to the financial condition, operations, performance and management of the Authority" on a regular basis. Certain actions by the GLWA Board require the affirmative vote of at least five members of the GLWA Board, including, but not limited to, setting rates and charges for water and sewer services, annual operating budgets, capital improvement programs, issuance of debt and any modification of the Lease.
- The Authority must establish biennial budgets, with the first year serving as formal authorization (including an approved schedule of service charges to support the budget) and the second year serving as an initial estimate of revenues and revenue requirements.
- The Authority has the ability to enter into water supply and sewage disposal contracts and may establish and fix a schedule of rates, fees, and other charges for its services.

Governance and Board Members

The GLWA Board is composed of six voting members. Two members are residents of the City of Detroit and are appointed by the Mayor of the City of Detroit. The Counties of Macomb, Oakland, and Wayne each appoint one member who is a resident of the County from which appointed and the Governor of the State of Michigan appoints one member who is a resident of an area served by the Authority outside of the Counties. All members of the GLWA Board must have at least seven years of experience in a regulated industry, a utility, engineering, finance, accounting or law. After the initial term specified

in the Articles of Incorporation, each GLWA Board member is appointed for a four-year term and serves at the pleasure of the appointing authority.

In order to more efficiently oversee the Authority's operations, the GLWA Board has adopted a committee structure. Four committees have been established: (i) Audit, (ii) Capital Improvement Planning, (iii) Operations and Resources and (iv) Legal.

The GLWA Board currently consists of:

Robert J. Daddow, CPA, GLWA Board Chairman; Representative for Oakland County. Mr. Daddow currently serves as Deputy County Executive of Oakland County. Mr. Daddow was the County's Director of Management and Budget from January 1993 until his appointment as Deputy County Executive in 2000. In both roles, he helped further Oakland County's multi-year budgeting, transform the County's retiree benefits from defined benefit to defined contribution, finance the paying-off of the County's retiree obligations, and maintain the County's AAA bond rating since 1998. Mr. Daddow served as Co-Chair of the Legislative Commission on Statutory Mandates concluding with a report issued in December 2009. He is member of the board of the Southeastern Michigan Regional Transit Authority and previously served as Vice-Chairman of the Michigan Municipal Services Authority. In March 2016, Mr. Daddow was appointed by Michigan Governor Rick Snyder to the 21st Century Infrastructure Commission, which was created to identify long-term strategies to help ensure Michigan's infrastructure remains safe and efficient now and into the future.

Gary A. Brown, GLWA Board Vice Chairman; Representative for the City of Detroit. Mr. Brown was appointed the Director of DWSD in October 2015. He is leading the department toward a customer-focused, fiscally responsible operation. Previously, Mr. Brown served as the City of Detroit's Group Executive for Operations and Chief Operating Officer under Mayor Mike Duggan, charged with ensuring continued improvement of city services. He was initially hired to the City's Executive Office as Chief Compliance Officer by Former Emergency Manager Kevyn Orr, after spending nearly four years as president Pro Tem of the Detroit City Council. Mr. Brown is also a former Deputy Chief of the Detroit Police Department, where he served for 26 years beginning as a patrol officer, rising through the ranks to become Commander of the 1st, 3rd, 9th and 11th Precincts, as well as the Gang Squad, Narcotics and Internal Affairs Divisions.

Joseph Nardone, GLWA Board Secretary; Representative for Wayne County. Mr. Nardone currently serves as Vice President of Business Development and Real Estate for the Wayne County Airport Authority (WCAA). On October 1, 2016, he will become the Interim Chief Executive Officer of the WCAA. Mr. Nardone sits on the Executive Committee of The Detroit Region Aerotropolis Development Corporation, which promotes development in the Detroit Metropolitan Airport-Willow Run Airport corridor. He also served as head of the transition team for Wayne County Executive Warren Evans after the latter's election to that office in November 2014. During his long career with Wayne County, Mr. Nardone served as the Director of the Wayne County Parks Division.

Brian Baker, GLWA Board Representative for Macomb County. Mr. Baker is the Finance and Budget Director for the City of Sterling Heights. Since 1991, Mr. Baker has overseen the award winning budget process of the City of Sterling Heights, including the implementation of a performance based budget. Since 2001, as the City of Sterling Heights' Chief Financial Officer, he has directed the offices of Assessing, Finance, Purchasing, and Treasury and oversees its financing and debt management initiatives. In that role Mr. Baker has worked extensively on the water and sewer rate-setting process, which has resulted in Sterling Heights achieving efficiencies and lowering costs. In addition, Mr. Baker has worked regionally serving in numerous capacities, including on a municipal revenue task force established by the

Governor's Office to address ongoing problems. He also has worked closely with the Southeastern Michigan Council of Governments in similar capacities.

Freman Hendrix, GLWA Board Representative for the City of Detroit. Mr. Hendrix is currently the president and partner of Advanced Security and Investigative Solutions, a uniformed guard services company. He has extensive experience in municipal government, having served as Deputy Mayor and Chief of Staff for former Detroit Mayor Dennis Archer. During his tenure with the City, Mr. Hendrix led strategic policy development and planning and assisted the City in achieving its first balanced budget in decades, as well as an unprecedented and continuous upgrading of the City's national bond rating. He is also a member of the Southeastern Michigan Regional Transit Authority Board of Directors, and a partner in Brush Park Development LLC (a joint venture with Rock Ventures), that is developing 8.5 acres in Detroit's Brush Park neighborhood. Mr. Hendrix is also a long-time community activist who co-founded the Rosedale-Grandmont Little League Baseball Program.

Craig Hupy, GLWA Board Representative for the State of Michigan. Mr. Hupy is the Public Services Area Administrator for the City of Ann Arbor. In this capacity, Mr. Hupy oversees several major departments including water and sewer operations, solid waste, project management, systems planning and coordinates long-term asset planning and construction across interdependent operations. He currently is administering the ongoing reconstruction of the Ann Arbor Wastewater Treatment Plant. Prior to being appointed to his position in 2011, Mr. Hupy held various leadership roles with the City of Ann Arbor, including Manager of both the Field Operations and Systems Planning Units. Through his work with Ann Arbor, Mr. Hupy has also gained significant experience in utility rate design. Mr. Hupy is a registered professional engineer, and holds multiple certifications through the Department of Environmental Quality. He earned a bachelor's degree in civil engineering from Michigan Technological University.

Management Team

The GLWA management team is committed to building upon the history of improved performance of the Water System and the Sewer System that began in 2012. GLWA key personnel and their qualifications are:

Sue F. McCormick, Chief Executive Officer. Ms. McCormick was named the Chief Executive Officer of GLWA on October 19, 2015. Ms. McCormick was Director of the DWSD from January 2012 until December 31, 2015 where she was charged with implementing the 2011 orders of the United States District Court Honorable Judge Sean F. Cox, establishing a Clean Water Act compliance history, and reducing the forecasted trajectory of charges exceeding 8% per annum. Before her appointment to the top DWSD position by Mayor Dave Bing, Ms. McCormick served as Public Services Administrator for the City of Ann Arbor, Michigan, where she managed that city's entire physical infrastructure, including roads, solid waste, parks, fleet and facilities, and the water and sewer system. She first joined Ann Arbor city government as Water Utilities Director in January 2001. Prior to her work in Ann Arbor, she was with the Lansing Board of Water and Light for 22 years, serving as Environmental Chemist, Environmental Laboratory Manager, Manager of Water and Steam Planning, Water Technical Support Manager and Business Development Manager.

A native of Michigan's Upper Peninsula, McCormick earned a bachelor's degree from Lyman Briggs College at Michigan State University. She is active in the 58,000-member American Water Works Association (the "AWWA"), a prominent international organization for water industry professionals. She has served as AWWA-Michigan Director and as an association Vice President, and on the Water Quality Board of International Joint Commission. She is currently serving on the Board of Directors of the Association of Metropolitan Water Agencies.

Nicolette N. Bateson, CPA, Chief Financial Officer/Treasurer. Ms. Bateson is the Chief Financial Officer and Treasurer for GLWA. Ms. Bateson's service follows her tenure as the first CFO for the DWSD which began in February 2013. In that role she led the Financial Services Group through a significant transformation effort engaging cross-functional teams to achieve sustainable change. The result was a professionalized department with an unprecedented demonstration of transparency to all stakeholders. This pivotal effort supported intensive, collaborative discussions that were essential to forming the Authority.

Ms. Bateson possesses extensive financial and public administration experience. As a visiting specialist for the State and Local Government Program with Michigan State University Extension, Ms. Bateson worked with state and local officials to address the needs of cities in fiscal stress. Her research, educational programs, and writings related to public-sector financial challenges are often cited. In her roles as Assistant City Manager and Finance Director in local government, she was responsible for strategic planning, financial turnaround, information technology, labor relations, employee benefit design, project management and deploying multi-year budgeting and long-range capital planning. Ms. Bateson's professional career began with a national accounting firm serving clients in the construction, manufacturing, and nonprofit sector.

Ms. Bateson earned a Bachelor of Business Administration in professional accountancy from the University of Michigan-Dearborn and a Master of Public Administration in Public Administration from Eastern Michigan University.

William M. Wolfson, Chief Administrative and Compliance Officer/General Counsel. Mr. Wolfson is the Chief Administrative and Compliance Officer/General Counsel for GLWA, a position he held at DWSD prior to January 1, 2016. Mr. Wolfson joined the City of Detroit Law Department as an attorney in 1986 and served in the Law Department under Mayors Young and Archer until 1998, working as the legal liaison to the Detroit City Council and on several key initiatives such as the casino and stadium development projects. Upon leaving the City of Detroit, Mr. Wolfson moved to Wayne County's Department of Corporation Counsel and was appointed Deputy Corporation Counsel by County Executive Edward McNamara. The succeeding County Executive, Robert Ficano, appointed Mr. Wolfson to the position of Assistant Deputy County Executive/Director of Legal Affairs. In that position, Mr. Wolfson was responsible for the day-to-day operations of county government and its 4,500 employees. Mr. Wolfson retired from his Wayne County position in July 2009; he then went into private practice and contracted to serve as Wayne County's Interim Corporation Counsel. Mr. Wolfson is a graduate of the University of Michigan and the University of Minnesota Law School. He currently serves as a member of the Detroit Zoological Society's Board of Directors.

Suzanne R. Coffey, Chief Planning Officer. Ms. Coffey became the Chief Planning Officer for GLWA on January 1, 2016, a position she held at DWSD since August 24, 2015. In her capacity as Chief Planning Officer, Ms. Coffey champions GLWA's efforts to bolster the Authority's energy and asset management capacities as well as leading long term planning efforts such as the Wastewater Master Plan. She is currently filling an interim role as Chief Operating Officer for the Wastewater Treatment Plant. Ms. Coffey became very familiar with GLWA through her role as Manager in Oakland County's Water Resources Commissioner's office where she worked for 12 years, and she was an integral part of the DWSD-GLWA transition efforts. Ms. Coffey is a licensed Professional Engineer in the State of Michigan. She graduated Cum Laude from Lawrence Technological University with a Bachelor of Science in Civil Engineering and was named Young Engineer of the Year by the Northern Chapter of the Michigan Society of Professional Engineers.

Cheryl Porter, Chief Operating Officer. Ms. Porter became Chief Operating Officer of GLWA on January 1, 2016. Prior to that, Ms. Porter was the Chief Operating Officer of DWSD and Water

Production and Operations Manager of DWSD. She holds an F-1 Water Filtration Treatment Plant Operator license with the State of Michigan. Ms. Porter began her career with DWSD in 1996 as a Junior Chemist and has advanced over the years. She earned a Bachelor of Science from the University of Michigan, a Master of Business Administration with a concentration in Human Resources Management from Madonna University and a Juris Doctor from the University of Detroit.

Terri Tabor Conerway, Chief Organizational Development Officer. Ms. Conerway became the Chief Organizational Development Officer on January 1, 2016. Ms. Conerway brings approximately three decades of comprehensive Human Resource and Training Experience to her position with GLWA. Previously, Ms. Conerway was the Organizational Development Director of DWSD, a position she held since December 2013. Prior to this, Ms. Conerway served as Human Resources Director for the Detroit Public Library, and held numerous managerial positions since beginning her career with the City of Detroit in 1972. Ms. Conerway holds a Bachelor of Science in Psychology from Wayne State University, and has completed post-degree work in Educational Psychology at the University of Michigan. Ms. Conerway is certified as a facilitator for Influencer training at Franklin Covey.

W. Barnett Jones, Chief Security and Integrity Officer. Chief Jones was appointed the Chief Security and Integrity Officer for the Authority on January 1, 2016 after serving with DWSD in that capacity since May 2012. His extensive experience in law enforcement and security spans a 30-year career. Chief Jones is responsible for the Authority's entire security posture which includes the physical security and safety of employees, facilities and assets. In addition, Chief Jones has been pivotal in developing and implementing entity-wide integrity policies and procedures. Prior to his arrival at GLWA, Chief Jones served as Chief of Police, Police Administrator, Captain, Lieutenant, and Deputy Sheriff with large local units of government in Michigan including the supervision of both police and fire personnel. Chief Jones has a Masters in Liberal Studies from Eastern Michigan University and a Bachelor of Arts in General Studies and Human Resources from the University of Michigan-Dearborn. He has been involved in many professional and civic organizations, including the Deputy Sheriffs' Association, the Crime Prevention Association of Michigan, and the Executive Board of the March of Dimes.

Michelle A. Zdrodowski, Chief Public Affairs Officer. Ms. Zdrodowski became Chief Public Affairs Officer for GLWA on July 6, 2016. In her capacity as Chief Public Affairs Officer, she guides the organization's efforts to build and maintain its relationships with internal and external stakeholder communities. Ms. Zdrodowski brings nearly 30 years of strategic communications and community engagement experience to GLWA. Immediately prior to joining the GLWA team, she served as Chief Communications Officer for Detroit Public Schools during a period of unprecedented challenge and change. Her previous public sector communications experience also includes her tenure as Deputy Press Secretary to former Detroit Mayor Dennis Archer. Ms. Zdrodowski also spent more than a decade leading the nonprofit/government practice group for a Detroit-based public relations agency. Ms. Zdrodowski holds a Bachelor of Arts in Communications from Michigan State University.

Jeffrey E. Small, Chief Information Officer. Mr. Small became Chief Information Officer for GLWA on August 15, 2016. In his capacity as Chief Information Officer, Mr. Small provides information technology (IT) strategy and implementation for the organization. Mr. Small brings 30 years of IT and business process experience to GLWA. Immediately prior to joining the GLWA team, he served for four years as Deputy Chief Information Officer at Wayne County, Michigan. Prior to his work at Wayne County, Mr. Small held IT leadership roles at several multi-national companies in a cross-section of industries, including retail, sourcing, brand-management and consumer products. Mr. Small holds a Bachelor of Arts in Political Science from The George Washington University and a Masters in Computer Information Systems from Baker College.

Jonathan Wheatley, Public Finance Manager. Mr. Wheatley became Public Finance Manager for GLWA on January 1, 2016, a position he held at DWSD since January 2015. In addition, Mr. Wheatley is the project manager for the implementation of the WRAP program. At the time he joined DWSD, he brought over 16 years of experience in municipal securities and corporate finance. Mr. Wheatley's experience encompassed extensive advisory work with various cities, townships, counties, schools and hospitals in endeavoring to determine their capital financing requirements and included the preparation of proposals, the restructuring of securities and identifying cash flow requirements. Mr. Wheatley has also performed comprehensive utility system rate studies to ensure that local systems remain self-supporting. He is a graduate of the University of Detroit Mercy with a Bachelor of Science in Business Administration.

Organizational Optimization

In October 2012, the management team began working with an organizational consultant to facilitate organizational optimization. In December 2012, five distinct employee teams began evaluating over 50 business processes by focusing on three key organizational design elements: people, processes and technology. In March 2013, the employee teams reported their findings, which supported an optimized organizational design through job redesign, increased use of technology and the introduction of efficiencies to reduce operating expenses.

In April 2013, implementation of the new organizational design began. Pilot programs for the new job and business process designs were implemented throughout the wastewater, water, field services, information technology and customer service areas. An organizational development team drafted and published 57 new job classification descriptions replacing the prior, narrowly defined 257 job classifications. Management met with its represented workforce and negotiated collective bargaining agreements ("CBAs") to ensure continued benefits and benefit coverage for those employees in preparation for the assignment of the collective bargaining agreements. See "Employees" below. From December 2013 through October 2015, efforts focused on posting and filling the new job classifications. Further analyses conducted during the stand-up activities for GLWA led to assignments of responsibilities and full-time equivalent employee ("FTE") allocations. On January 1, 2016, GLWA hired approximately 700 former DWSD employees and began recruiting to fill the remaining vacancies.

GLWA balances flexibility and staffing needs with a combination of employees and transitional services contracts. The Fiscal Year 2017 budget provides funding for 1,105 FTE positions of which 110 are budgeted to be staffed through services contracts. This staffing level is largely consistent with the optimized operational staffing plan of 1,005 carried forward with some adjustment for shared services, planning, and loss of economies of scale in administrative functions as a result of the bifurcation of the wholesale and retail functions since January 1, 2016.

Awards

In June 2016, the Authority received the "10-Year Directors Award" from the Partnership for Safe Water, a program developed by the EPA, American Water Works Association (AWWA), and associated partner organizations. This program recognizes the Authority's efforts toward improving water quality by optimizing system operations. The Lake Huron, Northeast and Southwest water treatment plants earned the honor for successfully maintaining the Directors Award level of performance for a 10-year period. This award was achieved through a self-assessment and peer review process, a comprehensive evaluation of each treatment plant's operations and performance, identification of performance limiting factors, and the development of action plans to achieve optimization. Further, as a commitment to transparency, each water treatment plant will issue an annual report of its performance.

Employees

As of August 31, 2016, the Authority had approximately 819 employees, including persons with professional qualifications in the fields of water and wastewater operations, construction, engineering, capital planning, environmental science, facility and systems security, accounting, finance, law and management. Of that amount, approximately 596 of the Authority's employees were organized in collective bargaining units. The Authority believes that its relationships with its employees and their representatives are generally good.

On the January 1, 2016, the Effective Date of the Leases, four unions had CBAs in place with DWSD that were assumed by the Authority pursuant to the terms of the Leases. Those unions and the number of employee members as of August 31, 2016 are:

- American Federation of State County and Municipal Employees, Local 2920, 366 FTEs, CBA expires June 30, 2018;
- Association of Professional Construction Inspectors, 11 FTEs, CBA expires June 30, 2020;
- Greater Detroit Building and Construction Trades Council, 112 FTEs, expired June 30, 2016 and is extended day-to-day as provided in the CBA; and
- Senior Water Systems Chemist Association, 59 FTEs, expired June 30, 2016 and is extended day-to-day as provided in the CBA.

The following unions formerly represented DWSD employees but did not have CBAs in place with DWSD on the January 1, 2016, Effective Date of the Leases. These unions have yet to establish a relationship with the Authority.

- Association of Municipal Engineers, 38 FTEs; and
- Senior Accountants, Analysts & Appraisers Association, 10 FTEs.

Retirement and Other Employee Benefits

As a new organization, GLWA was able to establish a modernized employee benefit program. Two key objectives of the new plan design were to provide flexibility to attract and retain a multi-generational workforce as well as ensure the Authority would have no unfunded liabilities.

GLWA offers its employees a defined contribution retirement plan with an optional, participatory deferred compensation plan. The plans are administered by an independent third party vendor selected by GLWA. The Authority contributes an amount equal to 6% of base wages for eligible employees to the defined contribution retirement plan. Employees may make voluntary pre-tax contributions to the deferred compensation plan up to the annual limits set by the Internal Revenue Service (the "IRS"). The Authority will match an employee's voluntary contribution on a dollar-for-dollar basis up to 3% of base wages. Both the 6% employer contribution and the 3% employer matching contribution are subject to a three year cliff vesting schedule.

Full-time employees of the Authority are also eligible to participate in group medical, prescription drug, dental, and vision plans offered by GLWA. Under these plans, covered employees contribute 20% of the premium costs of these benefits through employee payroll deductions based upon

the plan and coverage tier selected by the employee. The Authority also provides employer-paid group life insurance and disability insurance to full-time employees as well as a flexible spending account.

The Authority also offers a defined contribution retiree health care savings program. The Authority contributes eighty dollars (\$80) per pay period for active full-time employees. Those employees contribute ten dollars (\$10) dollars per pay period on a pre-tax basis. The Authority's contributions are subject to a three year cliff vesting schedule. Vested account balances are available to pay for post-employment health care expense for the participant and the participant's beneficiaries on a tax-free basis. The plan does not require the Authority to pay any additional amounts in connection with retiree healthcare.

Consistent with the terms of the Lease, as of January 1, 2016, the Authority assumed responsibility for a pro-rata share of DWSD's liability for the City's General Retirement System ("GRS") pension plan that was frozen and terminated in 2014. For a discussion of the potential "tail" liability of the Authority after June 30, 2023 for those legacy costs, see "AUTHORITY FINANCIAL OPERATIONS – Legacy Retirement System Obligations of the Authority."

THE SERIES 2016 BONDS

General

The Series 2016 Bonds are being issued by the Authority and will mature on the dates and in the principal amounts set forth on the inside cover page of this Official Statement. The Series 2016 Bonds will bear interest from their date of delivery until maturity or prior redemption, payable semiannually on January 1 and July 1 of each year commencing January 1, 2017 at the respective interest rates set forth on the inside cover of this Official Statement. The Series 2016 Bonds will be issued as fully registered bonds in denominations of \$5,000 and integral multiples thereof.

Optional Redemption

The Series 2016 Bonds maturing prior to July 1, 2027 are not subject to optional redemption prior to maturity.

The Series 2016 Bonds maturing on or after July 1, 2027 are subject to redemption at the option of the Authority on or after July 1, 2026 in whole or in part, at any time and, if in part, from such maturities as the Authority determines, at par, plus accrued interest to the redemption date.

Mandatory Redemption

The Series 2016A Bonds and the Series 2016B Bonds maturing on July 1, 2046 (collectively, the "Term Bonds") are subject to mandatory sinking fund redemption at a redemption price equal to the principal amount thereof to be redeemed on July 1 in the years and amounts as follows:

Series 2016A Bonds Maturing July 1, 2046

<u>Year</u>	<u>Amount</u>
2021	\$5,000
2022	5,000
2023	5,000
2024	5,000
2025	5,000
2026	5,000
2027	5,000
2028	5,000
2029	5,000
2030	5,000
2031	5,000
2032	5,000
2033	5,000
2034	5,000
2035	5,000
2036	5,000
2037	5,000
2038	5,000
2039	5,000
2040	5,000
2041	5,000
2042	15,905,000
2043	16,705,000
2044	17,535,000
2045	18,415,000
2046	19,335,000*

*Maturity

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Series 2016B Bonds Maturing on July 1, 2046

<u>Year</u>	<u>Amount</u>
2021	\$5,000
2022	5,000
2023	5,000
2024	5,000
2025	5,000
2026	5,000
2027	5,000
2028	5,000
2029	5,000
2030	5,000
2031	5,000
2032	5,000
2033	5,000
2034	5,000
2035	5,000
2036	5,000
2037	5,000
2038	5,000
2039	5,000
2040	5,000
2041	5,000
2042	29,630,000
2043	31,110,000
2044	32,670,000
2045	34,300,000
2046	36,015,000*

*Maturity

Whenever any Term Bond is redeemed at the option of the Authority, the principal amount thereof so redeemed shall be credited against the unsatisfied balance of future sinking fund installments or final maturity amount established with respect to such Term Bond, in such amounts and against such installments or final maturity amount as shall be determined by the Authority in the proceedings authorizing such optional redemption or, in the absence of such determination, shall be credited pro-rata against the unsatisfied balance of the applicable sinking fund installments and final maturity amount.

On or prior to the 60th day preceding any sinking fund installment date, the Authority may purchase Term Bonds that are subject to mandatory redemption on such sinking fund installment date, at such prices (not exceeding par plus accrued interest) as the Authority shall determine. Any Term Bond so purchased shall be cancelled and the principal amount thereof so purchased shall be credited against the unsatisfied balance of the next ensuing sinking fund installment of the Term Bonds of the same series, maturity and interest rate as the Term Bond so purchased.

Redemption Procedures

Notice of Redemption

Under the Ordinance, the Trustee will mail, by first class mail, as specified in the Ordinance, a notice of redemption to the Holders of the Series 2016 Bonds to be redeemed at least 30 and not more than 60 days prior to the redemption date. If any optional redemption is to be made under the Ordinance with funds that the Authority expects to receive between the time of the giving of such notice and the redemption date, the notice will expressly condition such redemption on timely receipt of such funds. The failure of any Bondholder to receive any such notice or any defect in such notice with respect to any Series 2016 Bond or portion thereof will not affect the validity of any proceedings for the redemption of any Series 2016 Bonds.

Selection of Bonds to be Redeemed

When Series 2016 Bonds are to be redeemed in part, the Authority shall specify to the Trustee the Series designation, maturity, and Original Issue Date of the Bonds from which Series 2016 Bonds or portions of Series 2016 Bonds to be redeemed shall be selected. Subject to the Authority's specification, the particular Series 2016 Bonds or portions of Series 2016 Bonds to be redeemed will be selected by the Trustee by lot or in such other manner as the Trustee in its discretion may deem fair, provided that (i) if only a portion of any Series 2016 Bond is to be redeemed, the principal amount of the portion remaining Outstanding will be equal to \$5,000 or an integral multiple of \$5,000 and (ii) in selecting Series 2016 Bonds for redemption, the Trustee will treat each Series 2016 Bond as representing that number of Series 2016 Bonds that is obtained by dividing the principal amount of such Series 2016 Bond by \$5,000.

Sources and Uses of Funds for the Series 2016 Bonds

Sources:

Par Amount	\$917,805,000.00
Original Issue Premium	139,113,281.25
Amounts Available in Bond Funds Related to Refunded Bonds	16,458,867.84
Amounts Released from Bond Reserve Accounts	25,163,017.29
Total Sources:	\$1,098,540,166.38

Uses:

Deposit to GLWA Regional System Construction Fund	\$225,883,017.72
Deposit to DWSD Local System Construction Fund	56,995,799.94
Deposit to Escrow Fund	811,343,559.51
Costs of Issuance	4,317,789.21
Total Uses:	\$1,098,540,166.38

Plan of Financing

Refunding

A portion of the proceeds of the Series 2016C and Series 2016D Bonds will be applied to the refunding and redemption of the Refunded Bonds.

A portion of the proceeds of the Series 2016C Bonds and of the Series 2016D Bonds will be used to establish an escrow fund (the “Escrow Fund”) composed of cash and non-callable direct obligations of the United States or obligations the payment of principal and interest on which is fully and unconditionally guaranteed by the United States (collectively, “Government Obligations”). The Escrow Fund will be held by the corporate trust office of U.S. Bank National Association, Detroit, Michigan, as escrow trustee (the “Escrow Trustee”) and will be used to pay when due the principal of and interest on the Refunded Bonds when due or called for redemption. The Escrow Fund will be held by the Escrow Trustee pursuant to an escrow agreement (the “Escrow Agreement”), which irrevocably directs the Escrow Trustee to make the payment of principal of and interest on the Refunded Bonds. The Escrow Fund will be such that the cash and the principal and interest payments received on the Government Obligations will be sufficient, without reinvestment, except as provided in the Escrow Agreement, to pay the principal of and interest on the Refunded Bonds as they become due or are called for redemption, as set forth in the Escrow Agreement.

The accuracy of the mathematical computations (i) of the adequacy of cash and certain Government Obligations to be held in the Escrow Fund and used, together with the earnings thereon, to pay the principal of and interest on the Refunded Bonds when due or at call for redemption and (ii) demonstrating that the yield on the Government Obligations held in the Escrow Fund is not greater than the yield on the Series 2016 Bonds, supporting the conclusion of Bond Counsel to GLWA that the interest on the Series 2016 Bonds is excluded from gross income for federal income purposes, will be verified by Robert Thomas, CPA LLC based upon information supplied by the Underwriters and the interpretations of Section 148 of the Internal Revenue Code of 1986, as amended (the “Code”), as provided by Bond Counsel to GLWA.

New Money

A portion of the proceeds of the Series 2016A and Series 2016B Bonds will be used to finance Regional Water System capital improvement expenditures scheduled in the Authority’s Capital Improvement Program (“CIP”) through June 30, 2018 and to fund an approximately \$57 million deposit into the construction fund for DWSD to finance Local Water System capital expenditures identified in DWSD’s Capital Improvement Program through June 30, 2018, including elements of DWSD’s ongoing retail water main replacement program. See “THE MASTER PLAN AND THE CAPITAL IMPROVEMENT PLAN - Capital Improvement Program and Planning Process.”

Bond Insurance

The scheduled payment of the principal of and interest on the Series 2016D Bonds maturing on July 1, 2033 (CUSIP No. 39081JBC1) (the “Insured Bonds”) when due shall be insured by a municipal bond insurance policy to be issued by AGM simultaneously with the delivery of such Series 2016D Bonds. See “BOND INSURANCE” herein.

Replacement Bonds

In the event that the book-entry-only system is discontinued, the Trustee will authenticate and make available for delivery replacement Series 2016 Bonds in the form of fully registered bond certificates. In addition, the following provisions would apply: (i) principal of and redemption premium, if any, on the Series 2016 Bonds will be payable in lawful money of the United States of America at the corporate trust office of the Trustee or such other office as may be designated by the Authority; (ii) interest on the Series 2016 Bonds will be payable by check or draft mailed to the registered owners thereof or, upon five days written notice to the Trustee given by a Registered Owner of a Series 2016

Bonds in an aggregate principal amount of at least \$100,000, by wire transfer of funds to a bank account in the United States designated by such Registered Owner; and (iii) interest on the Series 2016 Bonds will be payable by check or draft to the Registered Owners whose names appear on the registration books of the Trustee as of the close of business on the fifteenth day of the calendar month immediately preceding the applicable interest payment date, all as provided more particularly in the Bond Ordinance (“Registered Owners”).

Book-Entry Only System

The Depository Trust Company, New York, New York (“DTC”) will act as securities depository for the Series 2016 Bonds. The Series 2016 Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC’s partnership nominee). One fully-registered bond will be issued for the Series 2016 Bonds of each series and maturity in aggregate principal amount of such maturity and will be deposited with DTC. A description of the DTC procedures is set forth in APPENDIX XI.

SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2016 BONDS

Pursuant to the provisions of Act 94, all DWSD Water Bonds assumed by GLWA under the Bond Ordinance and all Additional Bonds, including the Series 2016 Bonds, to be issued by GLWA under the Bond Ordinance (the DWSD Water Bonds and all such Additional Bonds, together with Reimbursement Obligations and Junior Lien Reimbursement Obligations, the “Bonds”) are payable solely from the Pledged Assets, which include the Net Revenues of the Water System and amounts available in certain funds and accounts established in accordance with the Bond Ordinance. **The Bonds are secured by a statutory lien on the Pledged Assets pursuant to Act 94 and the Bond Ordinance. The Series 2016 Bonds are payable solely from the revenue pledged as security for the Series 2016 Bonds in the Bond Ordinance, including the funds and accounts established under the Bond Ordinance for the benefit of the Series 2016 Bonds. The Bonds are self-liquidating revenue bonds and are not general obligations of GLWA and do not constitute an indebtedness of GLWA within any constitutional or statutory limitation, but are payable solely from the Pledged Assets.**

The Bond Ordinance amends, restates and incorporates certain material provisions of Ordinance No. 01-05 and the related Trust Indenture of the City relating to the DWSD Water Bonds for the efficient administration of the Regional Water System, the assumption of the DWSD Water Bonds, and the issuance of Additional Bonds to finance additional costs of extensions, additions and improvements to the Regional Water System and the Local Water System, which may be secured by parity or subordinate lien interests in the Net Revenues with the DWSD Water Bonds and with the Additional Bonds to be issued by GLWA. For a summary of the Bond Ordinance, see APPENDIX VI – SUMMARY OF THE BOND ORDINANCE.

Pledged Assets

“Pledged Assets” under the Bond Ordinance currently consist of:

- Net Revenues;
- The funds and accounts established by or pursuant to the Bond Ordinance except for the Operation and Maintenance Fund, the Construction Fund and the Rebate Fund and any account thereof; and
- Investments of amounts or any income or gain realized therefrom credited to any fund, account or subaccount that is a Pledged Asset.

“*Revenues*” are defined in the Bond Ordinance as the revenues, including the Retail Revenues, of GLWA from the Water System (construed in accordance with Act 94) and include (a) amounts received from a Swap Provider under a Swap Agreement, including amounts payable upon termination thereof, (b) income earned and gains realized from the investment of amounts in the various funds, accounts and subaccounts established by the Bond Ordinance (other than the Construction Fund for any Fiscal Year in which earnings on the Construction Fund are not credited to the Receiving Fund) and (c) all moneys collected directly or indirectly by GLWA or by the City, as agent of GLWA, under the Water and Sewer Services Agreement, and deposited or to be deposited into the Receiving Fund pursuant to the Bond Ordinance. The Authority has no Swap Agreements outstanding.

“*Net Revenues*” are defined in the Bond Ordinance as all Revenues except for those transferred to the Operation and Maintenance Fund.

Under the Bond Ordinance, the Pledged Assets for the Bonds consisting of the trust estate (the “Trust Estate”) are pledged to the Trustee for the payment of the Bonds (including the DWSD Water Bonds) in accordance with the terms and provisions of Act 94 and the Bond Ordinance and any Series Ordinance relating to a Series of Bonds. This pledge was valid and binding from and after the Effective Date, and the Pledged Assets were immediately subject to the lien of such pledge without any physical delivery thereof, recordation of the Bond Ordinance or further act, and the lien of such pledge was and is valid and binding as against all parties having claims of any kind in tort, contract or otherwise against GLWA, regardless of whether such parties have notice thereof.

Flow of Funds

Under the Bond Ordinance, in accordance with the requirements of Act 94 and the Lease, GLWA has established certain funds and accounts for the Water System to be held in trust by the Trustee. The Bond Ordinance permits the establishment of additional funds for additional priorities of GLWA Bonds.

In accordance with the terms of Act 94 and the Bond Ordinance, all Revenues of the Water System shall be deposited with the Trustee and, with the exception of Revenues transferred to the GLWA Regional Operation and Maintenance Account or the Detroit Local Operation and Maintenance Account of the Operation and Maintenance Fund as directed by GLWA as provided in the Bond Ordinance, held in trust pursuant to the terms of the Bond Ordinance. The Lease and the Bond Ordinance provide that, subject to the issuance of Bonds permitted by the Bond Ordinance to satisfy all or a portion of the Pension Obligation, pursuant to the provisions of paragraph 24 of the Bankruptcy Order, the contribution to the Prior GRS pension plan set forth in the Plan of Adjustment to be paid by DWSD and GLWA shall be payable as follows: (i) the portion of that contribution equal to \$24 million annually, plus the share of the annual “defined contribution” (as such term is used in the Bankruptcy Order) payments to be allocated between the Sewer System and the Water System, will be paid by the Trustee as Operation and Maintenance Expenses under priority “First” below, and (ii) the difference between the annual GRS pension plan contribution provided for in the Plan of Adjustment and \$24 million will be paid by the Trustee out of the Pension Obligation Payment Fund under priority “Fifth” below. See “AUTHORITY FINANCIAL OPERATIONS – Legacy Retirement System Obligations of the Authority” and “THE DETROIT WATER AND SEWERAGE DEPARTMENT – Legacy Obligations of the Department.”

As of the first day of each month (or, in the case of the transfer to the respective Reserve Account, following the annual July 1 valuation of investments in such Bond Reserve Account, pursuant to the Bond Ordinance), amounts credited to the Receiving Fund, including any Lease Payment (which is to be applied to the Fund(s) and Account(s) designated by the City pursuant to the Lease) shall be transferred seriatim into the following funds and accounts but only within the respective limitations and only if the maximum amount within such limitation has been credited to the preceding fund or account:

First: to the Authority Regional Operation and Maintenance Account and the Detroit Local Operation and Maintenance Account of the Operation and Maintenance Fund, 1/12 of the then current Fiscal Year's Operation and Maintenance Expenses of the Regional Water System and the Local Water System, respectively, as determined by GLWA and certified to the Trustee by an Authorized Officer as sufficient to provide for the payment of the next month's expenses of administration and operation of the Regional Water System and the Local Water System, respectively, and such current expenses for the maintenance thereof as may be necessary to preserve the same in good repair and working order;

Second: to the Senior Lien Bond Debt Service Account, an amount that, when added to all other amounts then on deposit therein, shall equal the Debt Service Installment Requirement for Senior Lien Bonds as of the first day of such month;

Third: following the annual July 1 valuation of investments in the Senior Lien Bond Reserve Account pursuant to the Bond Ordinance, to the Senior Lien Bond Reserve Account, an amount, if any, that when added to all other amounts then on deposit therein shall equal the Reserve Requirement for Senior Lien Bonds;

Fourth: to the Bond Interest and Redemption Fund established for each Priority of Lien of Junior Lien Bonds, beginning with the Second Lien Bonds and continuing in descending order of priority to, and including, each Priority of Lien of Junior Lien Bonds, as follows:

First: to the Debt Service Account established for such Priority of Lien, an amount that, when added to amounts then on deposit in such account, shall equal the Debt Service Installment Requirement for Junior Lien Bonds of such Priority of Lien as of the first day of such month; and

Second: following the annual July 1 valuation of investments in the Reserve Accounts pursuant to the Bond Ordinance, to the Reserve Account, if any, established for such Priority of Lien, an amount that, when added to amounts then on deposit in such account, shall equal the Reserve Requirement for such Priority of Lien of Junior Lien Bonds;

Fifth: except as provided in the Bond Ordinance with respect to the initial deposit to the Pension Obligation Payment Fund, to the extent Pension Junior Lien Bonds are not issued, to the Pension Obligation Payment Fund an amount that equals 1/12 of the Required Annual GRS Payment and 1/12 of the BC Note Obligation at the written direction of an Authorized Officer to the Trustee;

Sixth: except as provided in the Bond Ordinance with respect to the initial deposit to the WRAP Fund, to the WRAP Fund, 1/12 of the amount to be deposited therein for the current Fiscal Year as directed in writing by an Authorized Officer to the Trustee;

Seventh: except as otherwise provided in the Bond Ordinance with respect to the initial deposit to the Budget Stabilization Fund, for each of the Fiscal Years 2016, 2017 and 2018, to the Budget Stabilization Fund, an amount equal to 1/12 of one-third of the amount necessary to assure that the Budget Stabilization Requirement will be on deposit in the Budget Stabilization Fund within three full Fiscal Years at the written direction of an Authorized Officer to the Trustee and for subsequent Fiscal Years thereafter 1/12 of an amount that when added to amounts then on

deposit in the Budget Stabilization Fund shall equal the Budget Stabilization Requirement, at the written direction of an Authorized Officer to the Trustee;

Eighth: to the Extraordinary Repair and Replacement Reserve Fund, the amount of the Extraordinary Repair and Replacement Minimum Requirement to the extent that the balance thereof is less than the Extraordinary Repair and Replacement Maximum Requirement; and

Ninth: at the written direction of an Authorized Officer to the Trustee, to the Authority Improvement and Extension Account and the Detroit Local Improvement and Extension Account of the Improvement and Extension Fund, such amounts as GLWA may deem advisable for the Regional Water System and Local Water System; provided that no amount shall be deposited in either such account for so long as a withdrawal from the Extraordinary Repair and Replacement Reserve Fund remains unpaid.

In any month, funds on deposit in the Receiving Fund in excess of the requirements set forth above may, upon the direction of GLWA, be transferred to the Improvement and Extension Fund (provided that no amount shall be deposited to the Improvement and Extension Fund or credited thereto for so long as a withdrawal from the Extraordinary Repair and Replacement Reserve Fund remains unpaid).

Any amounts remaining in the Receiving Fund as of the last day of each Fiscal Year shall be applied against future years' Revenue deposit obligations under the Bond Ordinance, unless directed by GLWA within thirty (30) days of completion of the Fiscal Year's audited financial statements to be deposited in the Surplus Fund.

Priority of Lien

The Bonds are secured under the Bond Ordinance in accordance with their relative Priority of Lien by a statutory lien on the Pledged Assets (each of such relative priorities hereinafter referred to as a "Priority of Lien"), as described below.

- Senior Lien Water Supply System Revenue Bonds (the "Senior Lien Bonds") are secured by a first lien on the Pledged Assets and rank first in the order of payment from Net Revenues.
- Second Lien Water Supply System Revenue Bonds (the "Second Lien Bonds") are secured by a lien on the Pledged Assets second only to the Senior Lien Bonds and rank second in order of payment from Net Revenues; and
- Other Junior Lien Water Supply System Revenue Bonds (the "SRF Junior Lien Bonds") have a lien subordinate to the lien of all Senior Lien Bonds and Second Lien Bonds and rank last in order of payment from Net Revenues.

Rate Covenant

Under the Bond Ordinance, the Authority covenants that the rates shall be fixed and revised from time to time as may be expected to be necessary to produce the greater of:

- The amounts required: (1) to provide for the payment of the Operation and Maintenance Expenses of the Water System; and (2) to provide for the payment of all Debt Service Installment Requirements coming due during the Fiscal Year of calculation; and (3) to provide for the creation and maintenance of reserves therefor as required by the Bond Ordinance; and (4) to provide for the payment of the Lease Payment; and (5) to provide for the deposit to the WRAP Fund; and (6) to repay any withdrawals from the Extraordinary

Repair and Replacement Fund; and (7) to provide for such other expenditures and funds for the Water System as the Bond Ordinance may require;

- Amounts so that the Rate Covenant Debt Service Coverage shall not be less than the Required Coverage; and
- Amounts required by Act 94.

The “Rate Covenant Debt Service Coverage” means, for purposes of the rate covenant in the Bond Ordinance and for each Priority of Lien, a number equal to Projected Net Revenues for the Fiscal Year of calculation divided by the aggregate Debt Service Installment Requirements on Bonds for such Fiscal Year, net of funds on hand representing capitalized interest, all for such Priority of Lien and any higher Priority of Lien.

Under Act 94, rates must be fixed and revised as necessary to comply with the Bond Ordinance. The Authority has covenanted at all times to fix and maintain charges for services furnished by the Water System as shall be sufficient to provide for the foregoing. Act 94 also provides that the Water System charges are not subject to supervision or regulation by any State bureau, board, commission or like agency or instrumentality of the State.

The coverage requirements for determining the Required Coverage under the Bond Ordinance are the following percentages:

Priority of Lien of Bonds	Percentage
Senior Lien Bonds	120%
Second Lien Bonds	110%
SRF Junior Lien Bonds and Pension Junior Lien Bonds	100%

As a matter of operating policy, the DWSD Board of Water Commissioners had established a debt service coverage policy of fixing service charges so that Rate Covenant Debt Service Coverage exceeded the Required Coverage amounts by at least 15 percentage points. While the GLWA Board has not formally established this policy, the management team has continued to plan according to and the financial plans presented herein are designed to comply with the prior policy. Notwithstanding the covenant to impose rates, fees and charges contained in the Bond Ordinance, under Michigan law, water rates established by GLWA must be reasonable and nondiscriminatory and are subject to review by the courts in that regard. In establishing its service charges, the actions of GLWA are presumed by the courts to be reasonable, but the rates must not be arbitrary, discriminatory or excessive. Consequently, the rates established by GLWA pursuant to the Bond Ordinance could be subject to challenges alleging that such charges are arbitrary, discriminatory or excessive.

The ability to pay debt service on the Series 2016 Bonds depends on the ability to generate Net Revenues that meet the levels required by the Bond Ordinance. Although the Bond Ordinance contains a covenant to impose rates, fees and charges and GLWA expects that sufficient Net Revenues will be generated through the imposition and collection of such rates, fees and charges and other Net Revenues described herein, there is no assurance that Net Revenues will be generated in the amounts required by the Bond Ordinance. The Bond Ordinance covenants do not constitute a guarantee that sufficient Net Revenues will be available to pay debt service on the Series 2016 Bonds.

Issuance of Additional Bonds

Under the Bond Ordinance, prior to or concurrently with the issuance of Additional Bonds of any Priority of Lien, GLWA shall calculate a number equal to Projected Net Revenues in the then current or the next succeeding Fiscal Year, or Historical Net Revenues, all as determined by GLWA, divided by Maximum Annual Debt Service for such Priority of Lien and any higher Priority of Lien (the “Additional Bonds Debt Service Coverage”). GLWA may elect to determine Additional Bonds Debt Service Coverage on the basis of Projected Net Revenues or Historical Net Revenues. GLWA is authorized to issue Additional Bonds on a parity with the Series 2016 Bonds for the purposes set forth in the Bond Ordinance if, but only if, GLWA certifies that the Additional Bonds Debt Service Coverage for each Priority of Lien (regardless of the Priority of Lien of the Additional Bonds) is not less than the Required Coverage. The determination in a Series Ordinance that the Additional Bonds Debt Service Coverage for each Priority of Lien is not less than the Required Coverage shall be conclusive.

Alternatively, GLWA may issue Additional Bonds of any Priority of Lien for refunding outstanding Bonds if the aggregate Debt Service Installment Requirements in the current Fiscal Year and each Fiscal Year until maturity on the Additional Bonds and all outstanding unrefunded Bonds of equal and higher Priority of Lien after giving effect to the refunding, is less than the aggregate Debt Service Installment Requirements in the current Fiscal Year and each Fiscal Year thereafter until maturity on all Bonds of equal and higher Priority of Lien without giving effect to the refunding. See APPENDIX VI - SUMMARY OF THE BOND ORDINANCE.

Reserve Accounts and Reserve Requirements

Pursuant to the Bond Ordinance, there has been established a Senior Lien Bond Reserve Account and a Second Lien Bond Reserve Account. Such Bond Reserve Accounts are held by the Trustee under and pursuant to the Bond Ordinance. SRF Junior Lien Bonds are not secured by any Reserve Account. Amounts in a Bond Reserve Account shall be used solely for the payment of the principal (and premium, if any) of and interest on Bonds of the same Priority of Lien for which such Bond Reserve Account was established, as to which there would otherwise be a default.

The Reserve Requirement for Senior Lien Bonds covered by the Senior Lien Bond Reserve Account is the lesser of (i) Maximum Annual Debt Service requirements for each Series of Senior Lien Bonds then outstanding or (ii) the maximum amount permitted by the Code. “Maximum Annual Debt Service” means, with respect to any given Priority of Lien, the maximum aggregate Debt Service Installment Requirements in any future Fiscal Year on outstanding Bonds of such Priority of Lien and any Additional Bonds then being issued. The Reserve Requirement for Second Lien Bonds covered by the Second Lien Bond Reserve Account is the lesser of (i) the Maximum Annual Debt Service on all Second Lien Bonds or (ii) the maximum amount permitted by the Code. The Bond Ordinance also permits Bond Reserve Accounts to be established on a series-specific basis pursuant to a Series Ordinance. If a Reserve Account is established for any other Priority of Lien of Junior Lien Bonds, the Reserve Requirement for such other Junior Lien Bonds shall be the amount set forth in a Series Ordinance establishing such Reserve Account, and if no amount is set forth, shall be zero.

Concurrently with the issuance of a Series of Bonds of a Priority of Lien for which a Bond Reserve Account has been or is being established, the Bond Ordinance requires there be credited to such Bond Reserve Account the amount that, when added to the amount on deposit in such account or credited thereto, equals the Reserve Requirement for the Bonds then to be issued and all Bonds of the same Priority of Lien then outstanding. As of the date of this Official Statement and reflecting the issuance of the Series 2016 Bonds, the Senior Lien Bond Reserve Account and Second Lien Bond Reserve Account balances were sufficient to meet or exceed the Reserve Requirement for the outstanding Senior Lien

Bonds and Second Lien Bonds, respectively. Pursuant to the Bond Ordinance, any Reserve Requirement with respect to Variable Rate Bonds is calculated at a fixed annual rate equal to the weighted average of the actual rates on such Variable Rate Bonds for each day during the 365 consecutive days (or any lesser period such Variable Rate Bonds are outstanding) ending on the last day of the month next preceding the date of calculation.

The Bond Ordinance permits the use of a letter of credit, surety bond or insurance policy (a “Reserve Account Credit Facility”) to fund any Bond Reserve Account if the provider has a credit rating at the time of issuance of such Series of Bonds not less than the credit rating of such Series of Bonds. There is no Bond Ordinance requirement that the rating of a Reserve Account Credit Facility which has been properly credited to a Reserve Account be maintained.

The following table summarizes the funding of the Reserve Requirements for the Senior Lien Bond Reserve Account and Second Lien Bond Reserve Account as of October 14, 2016 and reflects the issuance of the Series 2016 Bonds.

	Senior Lien	Second Lien	Aggregate System
Reserve Requirement	\$123,030,026	\$52,125,980	\$175,156,007
Funding Amounts			
Cash and Investments [†]	\$14,992,714	\$6,360,335	\$21,353,049
Credit Facilities*	\$108,087,313	\$45,815,645	\$153,902,958
Total	\$123,080,026	\$52,175,980	\$175,256,007

[†]Cash and Investments balance is after projected releases in conjunction with the delivery of the Series 2016 Bonds.

*For series-specific policies, represents the lesser of (a) the maximum amount of the policy or (b) the amount of the Reserve Requirement specifically allocated to the specific series of Bonds covered by such policy.

As of the date of this Official Statement, the Senior Lien Bond Reserve Account is funded with Cash and Investments and Reserve Account Credit Facilities in the form of the following surety or insurance policies:

(a) Financial Guaranty Insurance Company (“FGIC”) surety policy unconditionally guaranteeing the payment of principal of and interest on any Senior Lien Bonds up to a maximum aggregate available amount of \$16,729,163 and with a termination date of July 1, 2029.

(b) FGIC surety policy unconditionally guaranteeing the payment of principal of and interest on any Senior Lien Bonds up to a maximum aggregate available amount of \$15,954,125 and with a termination date of July 1, 2033.

(c) National Public Finance Guarantee Corporation (“National”), as reinsurer of and administrative agent for MBIA Insurance Corporation (“MBIA”), surety policy unconditionally guaranteeing the payment of principal of and interest on any Senior Lien Bonds up to an original maximum aggregate available amount of \$24,970,000 and with a termination date equal to the earlier of July 1, 2034 or the date on which the Series 2003(A) Bonds are no longer outstanding. ^{††}

(d) FGIC surety policy unconditionally guaranteeing the payment of principal of and interest on any Senior Lien Bonds up to a maximum aggregate available amount of \$4,000,000 and with a termination date of July 1, 2035.

^{††} At the time of issuance of the Series 2003(A) Senior Lien Bonds and the Series 2003(B) Second Lien Bonds, each of these surety policies was issued as a series-specific surety policy but each was later replaced with a parity surety policy.

(e) Assured Guaranty Municipal Corp., formerly known as Financial Security Assurance Inc. (“AGM”) surety policy unconditionally guaranteeing the payment of principal of and interest on any Senior Lien Bonds up to a maximum aggregate available amount of \$3,000,000 and with a termination date equal to the earlier of July 1, 2034 and the date on which the Series 2006(A) and Series 2006(D) Bonds are no longer outstanding.

(f) National, as reinsurer of and administrative agent for MBIA, surety policy unconditionally guaranteeing the payment of principal of and interest on any Senior Lien Bonds up to a maximum aggregate available amount of \$29,000,000 and with a termination date equal to the earlier of July 1, 2027 or the date on which all payments required on Senior Lien Bonds have been made.

(g) AGM surety policy unconditionally guaranteeing the payment of principal and interest on the Senior Lien Bonds, Series 2014A, up to a maximum aggregate available amount of \$17,022,153 and with a termination date of the earlier of July 1, 2037 or the date such bonds are no longer outstanding.

As of the date of this Official Statement, the Second Lien Bond Reserve Account is funded with Cash and Investments and Reserve Account Credit Facilities in the form of the following surety or insurance policies:

(a) FGIC surety policy unconditionally guaranteeing the payment of principal of and interest on any Second Lien Bonds up to a maximum aggregate available amount of \$6,815,645 and with a termination date of July 1, 2033.

(b) National, as reinsurer of and administrative agent for MBIA, surety policy unconditionally guaranteeing the payment of principal of and interest on any Second Lien Bonds up to an original maximum aggregate available amount of \$29,000,000 and with a termination date equal to the earlier of July 1, 2032 or the date on which the Series 2003(B) Bonds are no longer outstanding.^{††}

(c) AGM surety policy unconditionally guaranteeing the payment of principal of and interest on any Second Lien Bonds up to a maximum aggregate available amount of \$10,000,000 and with a termination date equal to the earlier of July 1, 2036 and the date on which the Series 2006(B) Bonds and Series 2006(C) Bonds are no longer outstanding.

As noted, certain of the Reserve Account requirements currently are funded through surety or insurance policies issued by MBIA, FGIC and AGM. Certain obligations of FGIC, including the surety policies listed above, have been novated to National, pursuant to the Novation Agreement between FGIC and National dated as of September 14, 2012. As a result, such obligations are now directly insured by National.

Although the Bond Ordinance requires that any Reserve Account Credit Facility be rated at the time of issuance of a Series of Bonds not less than the credit rating of such Series of Bonds at the time of its acquisition, there is no requirement that such rating be maintained. Accordingly, except for Reserve Amount Credit Facilities that relate to a specific Series of Bonds, all Reserve Account Credit Facilities are valued at their full face value for purposes of determining satisfaction of the applicable Reserve Requirement, regardless of the provider’s rating. If the Reserve Account Credit Facility were determined to have no value, as for example, if a court made such a determination in connection with the dissolution of the provider, then GLWA would be required to replenish the applicable Reserve Account with cash or

^{††} At time of issuance of the Series 2003(A) Senior Lien Bonds and the Series 2003(B) Second Lien Bonds, each of these surety policies was issued as a series-specific surety policy but each was later replaced with a parity surety policy.

through a replacement Reserve Account Credit Facility, as described herein under “SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2016 BONDS—Flow of Funds.”

Remedies

Upon the happening and continuance of any Event of Default under the Bond Ordinance, the Trustee may, or upon the request of the Holders of not less than 20% in principal amount of the Outstanding Bonds shall, proceed in its own name, to protect and enforce its rights and the rights of the Bondholders, by suit, action, or other proceedings, and to protect and enforce the statutory lien on the Net Revenues and enforce and compel the performance of all duties of the officials of the Authority as set forth in the Bond Ordinance. See APPENDIX VI – SUMMARY OF THE BOND ORDINANCE.

The remedies available under the Bond Ordinance upon the occurrence of an Event of Default are in many respects dependent upon judicial actions, which are often subject to substantial discretion and delay. Additionally, under State constitutional and statutory law and judicial decisions concerning remedies, certain of these remedies may be limited, or may not be readily available or enforceable. The enforceability of remedies or rights with respect to the Series 2016 Bonds and the Bond Ordinance also is limited by State and federal bankruptcy, reorganization, insolvency, sovereign immunity, moratorium and other similar laws regarding creditors’ rights or remedies currently in effect and may be limited by such laws hereafter enacted.

Reserve Fund Amendment

On August 10, the Authority adopted the Series Ordinance, which in addition to authorizing the issuance and sale of the Series 2016 Bonds, provided for an amendment (the “Reserve Fund Amendment”) to the Bond Ordinance which gives the Authority the option, but not the obligation, to reduce or eliminate the Reserve Requirement for the Senior Lien Bonds or the Second Lien Bonds, as the case may be, if the Authority obtains ratings of “Aa3” or “AA-” or higher on the Senior Lien Bonds from at least two of Moody’s, S&P, and Fitch and confirmation that neither of such ratings will be reduced solely as a result of the change in the Reserve Requirement for such Bonds. The Reserve Fund Amendment will become effective with respect to the Senior Lien Bonds and the Second Lien Bonds at such time as the holders of a majority in principal amount of Bonds of each affected Priority of Lien shall have consented, or shall be deemed to have consented, to the Reserve Fund Amendment. See APPENDIX VI – SUMMARY OF BOND ORDINANCE.

By purchasing the Series 2016 Bonds, the original and all subsequent purchasers of the Series 2016 Bonds shall be deemed to have consented to such Reserve Fund Amendment.

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OUTSTANDING AUTHORITY INDEBTEDNESS

The following table sets forth information with respect to outstanding Water Supply System Revenue Bonds as of October 14, 2016.

Water Supply System Revenue Bonds	Original Principal Amount	Outstanding as of October 14, 2016
Senior Lien Bonds		
Water Supply System Revenue Senior Lien Bonds, Series 2003A	\$ 234,805,000	\$ 100,000
Water Supply System Revenue Senior Lien Bonds, Series 2005B	194,900,000	3,285,000
Water Supply System Revenue Senior Lien Bonds, Series 2006A	280,000,000	100,000
Water Supply System Revenue Senior Lien Bonds, Series 2011A	379,590,000	297,815,000
Water Supply System Revenue Senior Lien Bonds, Series 2011B	17,195,000	4,925,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2011C	103,890,000	75,145,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2014A	206,540,000	200,215,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2014B	188,455,000	188,455,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2014C	62,700,000	62,700,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2014D	307,645,000	243,185,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2014E	9,270,000	9,270,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2015A	89,430,000	89,430,000
Water Supply System Revenue Senior Lien Bonds, Series 2016A	88,000,000	88,000,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2016C	443,930,000	443,930,000
	\$ 2,606,350,000	\$ 1,706,555,000
Second Lien Bonds		
Water Supply System Revenue Refunding Second Lien Bonds, Series 2001C	\$ 190,405,000	\$ 179,440,000
Water Supply System Revenue Second Lien Bonds, Series 2003B	41,770,000	100,000
Water Supply System Revenue Second Lien Bonds, Series 2006B	120,000,000	350,000
Water Supply System Revenue Refunding Second Lien Bonds, Series 2014F	65,425,000	65,425,000
Water Supply System Revenue Refunding Second Lien Bonds, Series 2014G	14,815,000	10,930,000
Water Supply System Revenue Refunding Second Lien Bonds, Series 2015B	37,235,000	37,235,000
Water Supply System Revenue Second Lien Bonds, Series 2016B	163,830,000	163,830,000
Water Supply System Revenue Refunding Second Lien Bonds, Series 2016D	222,045,000	222,045,000
	\$ 855,525,000	\$ 679,355,000
SRF Junior Lien Bonds		
Water Supply System Revenue Bonds, Series 2005-SRF-1	\$ 13,805,164	\$ 7,385,164
Water Supply System Revenue Bonds, Series 2005-SRF-2	8,891,730	4,641,730
Water Supply System Revenue Bonds, Series 2006-SRF	5,180,926	2,750,926
Water Supply System Revenue Bonds, Series 2008-SRF	2,590,941	1,205,941
Water Supply System Revenue Bonds, Series 2016-SRF	15,785,000	15,785,000
	\$ 46,253,761	\$ 31,768,761
Total Water Supply System Revenue Bonds	\$ 3,508,128,761	\$ 2,417,678,761

Source: THE AUTHORITY

DEBT SERVICE REQUIREMENTS

The following table sets forth the annual principal and interest requirements for the outstanding Senior Lien Bonds, Second Lien Bonds, SRF Junior Lien Bonds and the Series 2016 Bonds.

Fiscal Year Ended June 30	Senior Lien Bonds						Second Lien Bonds						Total Second Lien Debt Service	Outstanding SRF Junior Lien Debt Service ⁽¹⁾	Total System Debt Service
	Senior Lien Bonds, Series 2016						Second Lien Bonds, Series 2016								
	Outstanding Senior Lien Debt Service	Less: Refunded Debt Service	Principal	Interest	Total	Total Senior Lien Debt Service	Outstanding Second Lien Debt Service	Less: Refunded Debt Service	Principal	Interest	Total				
2017 ⁽³⁾	\$ 133,321,049	\$ (17,256,094)	\$ -	\$ 18,169,706	\$ 18,169,706	\$ 134,234,660	\$ 42,042,050	\$ (15,661,642)	\$ -	\$ 12,609,615	\$ 12,609,615	\$ 38,990,023	\$ 2,036,413	\$ 175,261,097	
2018	131,401,724	(30,522,066)	-	26,807,763	26,807,763	127,687,420	42,596,050	(18,347,588)	-	18,604,350	18,604,350	42,852,813	2,198,193	172,738,425	
2019	124,708,064	(32,285,006)	-	26,807,763	26,807,763	119,230,820	51,036,113	(20,620,088)	-	18,604,350	18,604,350	49,020,375	2,431,249	170,682,444	
2020	124,680,819	(27,578,706)	-	26,807,763	26,807,763	123,909,875	51,025,263	(18,969,063)	-	18,604,350	18,604,350	50,660,550	2,431,502	177,001,927	
2021	125,140,169	(25,336,556)	5,000	26,807,763	26,812,763	126,616,375	51,059,325	(17,583,638)	5,000	18,604,350	18,609,350	52,085,038	2,432,118	181,133,530	
2022	125,256,769	(29,521,906)	4,870,000	26,807,513	31,677,513	127,412,375	51,077,788	(22,193,988)	5,000	18,604,100	18,609,100	47,492,900	2,436,815	177,342,090	
2023	124,947,344	(43,712,281)	23,385,000	26,564,013	49,949,013	131,184,075	51,103,175	(21,863,800)	5,000	18,603,850	18,608,850	47,848,225	2,434,232	181,466,532	
2024	124,170,569	(23,708,906)	5,330,000	25,394,763	30,724,763	131,186,425	51,126,263	(23,294,713)	1,485,000	18,603,600	20,088,600	47,920,150	2,437,016	181,543,591	
2025	123,108,344	(42,350,656)	25,295,000	25,128,263	50,423,263	131,180,950	51,174,450	(23,299,850)	1,510,000	18,529,350	20,039,350	47,913,950	2,430,007	181,524,907	
2026	121,541,931	(31,607,956)	17,390,000	23,863,513	41,253,513	131,187,488	51,215,988	(23,438,163)	1,685,000	18,453,850	20,138,850	47,916,675	2,421,788	181,525,950	
2027	123,042,756	(34,966,581)	20,115,000	22,994,013	43,109,013	131,185,188	51,341,600	(24,478,350)	2,685,000	18,369,600	21,054,600	47,917,850	1,187,958	180,290,995	
2028	123,253,356	(53,922,981)	39,860,000	21,988,263	61,848,263	131,178,638	51,446,650	(24,474,788)	2,710,000	18,235,350	20,945,350	47,917,213	779,479	179,875,329	
2029	122,983,856	(29,820,681)	18,030,000	19,995,263	38,025,263	131,188,438	50,904,738	(24,460,975)	3,370,000	18,099,850	21,469,850	47,913,613	686,210	179,788,260	
2030	122,271,013	(29,829,438)	19,645,000	19,093,763	38,738,763	131,180,338	50,426,663	(46,346,163)	25,905,000	17,931,350	43,836,350	47,916,850	657,687	179,754,875	
2031	122,172,831	(57,958,456)	48,865,000	18,111,513	66,976,513	131,190,888	50,419,350	(46,344,100)	27,205,000	16,636,100	43,841,100	47,916,350	659,844	179,767,081	
2032	122,189,575	(69,078,500)	62,400,000	15,668,263	78,068,263	131,179,338	50,412,288	(46,338,038)	28,565,000	15,275,850	43,840,850	47,915,100	656,687	179,751,125	
2033	122,502,225	(81,459,100)	66,920,000	12,548,263	79,468,263	120,511,388	50,401,225	(46,333,975)	40,385,000	14,133,200	54,518,200	58,585,450	659,594	179,756,431	
2034	121,041,663	(23,494,738)	17,780,000	9,112,263	26,892,263	124,439,188	47,686,913	(5,547,413)	5,000	12,517,750	12,522,750	54,662,250	658,406	179,759,844	
2035	144,602,050	(95,714,375)	74,115,000	8,178,825	82,293,825	131,181,500	7,204,850	(5,542,850)	1,210,000	12,517,500	13,727,500	15,389,500	658,219	147,229,219	
2036	30,117,675	-	5,000	4,396,250	4,401,250	34,518,925	124,540,288	(89,663,288)	85,390,000	12,457,000	97,847,000	132,724,000	660,250	167,903,175	
2037	68,890,175	-	5,000	4,396,000	4,401,000	73,291,175	-	-	5,000	8,187,500	8,192,500	8,192,500	658,188	82,141,863	
2038	73,184,588	-	5,000	4,395,750	4,400,750	77,585,338	-	-	5,000	8,187,250	8,192,250	8,192,250	657,125	86,434,712	
2039	73,186,800	-	5,000	4,395,500	4,400,500	77,587,300	-	-	5,000	8,187,000	8,192,000	8,192,000	659,531	86,438,831	
2040	73,191,225	-	5,000	4,395,250	4,400,250	77,591,475	-	-	5,000	8,186,750	8,191,750	8,191,750	660,313	86,443,538	
2041	71,899,250	-	5,000	4,395,000	4,400,000	76,299,250	-	-	5,000	8,186,500	8,191,500	8,191,500	658,250	85,149,000	
2042	-	-	15,905,000	4,394,750	20,299,750	20,299,750	-	-	29,630,000	8,186,250	37,816,250	37,816,250	658,406	58,774,406	
2043	-	-	16,705,000	3,599,500	20,304,500	20,304,500	-	-	31,110,000	6,704,750	37,814,750	37,814,750	655,719	58,774,969	
2044	-	-	17,535,000	2,764,250	20,299,250	20,299,250	-	-	32,670,000	5,149,250	37,819,250	37,819,250	656,500	58,775,000	
2045	-	-	18,415,000	1,887,500	20,302,500	20,302,500	-	-	34,300,000	3,515,750	37,815,750	37,815,750	656,906	58,775,156	
2046	-	-	19,335,000	966,750	20,301,750	20,301,750	-	-	36,015,000	1,800,750	37,815,750	37,815,750	656,937	58,774,437	
2047	-	-	-	-	-	-	-	-	-	-	-	-	657,844	657,844	
2048	-	-	-	-	-	-	-	-	-	-	-	-	495,844	495,844	
	\$ 2,772,805,818	\$ (780,124,986)	\$ 531,930,000	\$ 440,835,743	\$ 972,765,743	\$ 2,965,446,575	\$ 1,028,241,025	\$ (564,802,467)	\$ 385,875,000	\$ 402,287,065	\$ 788,162,065	\$ 1,251,600,623	\$ 38,685,229	\$ 4,255,732,427	

(1) Outstanding SRF Junior Lien Bonds schedule assumes loans are currently fully drawn. In cases where SRF loans are not yet fully drawn, debt service will be lower.

(2) Debt Service Installment Requirements calculated as defined in the Master Bond Ordinance. July 1 payments are included in the prior fiscal year.

(3) FY 2017 payments represent full fiscal year, including payments made prior to October 14, 2016. FY17 Refunded Debt Service figures are adjusted for payments of Debt Service Installment Requirements made prior to October 14, 2016.

BOND INSURANCE

Assured Guaranty Municipal Corp. has supplied the following information for inclusion in this Official Statement, other than the information under the caption “Rights of AGM.” No representation is made by the Authority or the Underwriters as to the accuracy or completeness of this information. Reference is made to APPENDIX XII for the “SPECIMEN MUNICIPAL BOND INSURANCE POLICY.”

AGM Bond Insurance Policy

Concurrently with the issuance of the Series 2016 Bonds, AGM will issue its Municipal Bond Insurance Policy for the Insured Bonds (the “AGM Policy”). The AGM Policy guarantees the scheduled payment of principal of and interest on the Insured Bonds when due as set forth in the form of the AGM Policy included as an exhibit to this Official Statement.

The AGM Policy is not covered by any insurance security or guaranty fund established under New York, California, Connecticut or Florida insurance law.

Assured Guaranty Municipal Corp.

AGM is a New York domiciled financial guaranty insurance company and an indirect subsidiary of Assured Guaranty Ltd. (“AGL”), a Bermuda-based holding company whose shares are publicly traded and are listed on the New York Stock Exchange under the symbol “AGO”. AGL, through its operating subsidiaries, provides credit enhancement products to the U.S. and global public finance, infrastructure and structured finance markets. Neither AGL nor any of its shareholders or affiliates, other than AGM, is obligated to pay any debts of AGM or any claims under any insurance policy issued by AGM.

AGM’s financial strength is rated “AA” (stable outlook) by S&P Global Ratings, a business unit of Standard & Poor’s Financial Services LLC (“S&P”), “AA+” (stable outlook) by Kroll Bond Rating Agency, Inc. (“KBRA”) and “A2” (stable outlook) by Moody’s Investors Service, Inc. (“Moody’s”). Each rating of AGM should be evaluated independently. An explanation of the significance of the above ratings may be obtained from the applicable rating agency. The above ratings are not recommendations to buy, sell or hold any security, and such ratings are subject to revision or withdrawal at any time by the rating agencies, including withdrawal initiated at the request of AGM in its sole discretion. In addition, the rating agencies may at any time change AGM’s long-term rating outlooks or place such ratings on a watch list for possible downgrade in the near term. Any downward revision or withdrawal of any of the above ratings, the assignment of a negative outlook to such ratings or the placement of such ratings on a negative watch list may have an adverse effect on the market price of any security guaranteed by AGM. AGM only guarantees scheduled principal and scheduled interest payments payable by the issuer of bonds insured by AGM on the date(s) when such amounts were initially scheduled to become due and payable (subject to and in accordance with the terms of the relevant insurance policy), and does not guarantee the market price or liquidity of the securities it insures, nor does it guarantee that the ratings on such securities will not be revised or withdrawn.

Current Financial Strength Ratings

On July 27, 2016, S&P issued a credit rating report in which it affirmed AGM’s financial strength rating of “AA” (stable outlook). AGM can give no assurance as to any further ratings action that S&P may take.

On August 8, 2016, Moody's published a credit opinion affirming its existing insurance financial strength rating of "A2" (stable outlook) on AGM. AGM can give no assurance as to any further ratings action that Moody's may take.

On December 10, 2015, KBRA issued a financial guaranty surveillance report in which it affirmed AGM's insurance financial strength rating of "AA+" (stable outlook). AGM can give no assurance as to any further ratings action that KBRA may take.

For more information regarding AGM's financial strength ratings and the risks relating thereto, see AGL's Annual Report on Form 10-K for the fiscal year ended December 31, 2015.

Capitalization of AGM

At June 30, 2016, AGM's policyholders' surplus and contingency reserve were approximately \$3,841 million and its net unearned premium reserve was approximately \$1,459 million. Such amounts represent the combined surplus, contingency reserve and net unearned premium reserve of AGM, AGM's wholly owned subsidiary Assured Guaranty (Europe) Ltd. and 60.7% of AGM's indirect subsidiary Municipal Assurance Corp.; each amount of surplus, contingency reserve and net unearned premium reserve for each company was determined in accordance with statutory accounting principles.

Incorporation of Certain Documents by Reference

Portions of the following documents filed by AGL with the Securities and Exchange Commission (the "SEC") that relate to AGM are incorporated by reference into this Official Statement and shall be deemed to be a part hereof:

- (i) the Annual Report on Form 10-K for the fiscal year ended December 31, 2015 (filed by AGL with the SEC on February 26, 2016);
- (ii) the Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2016 (filed by AGL with the SEC on May 5, 2016); and
- (iii) the Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2016 (filed by AGL with the SEC on August 4, 2016).

All consolidated financial statements of AGM and all other information relating to AGM included in, or as exhibits to, documents filed by AGL with the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, excluding Current Reports or portions thereof "furnished" under Item 2.02 or Item 7.01 of Form 8-K, after the filing of the last document referred to above and before the termination of the offering of the Series 2016 Bonds shall be deemed incorporated by reference into this Official Statement and to be a part hereof from the respective dates of filing such documents. Copies of materials incorporated by reference are available over the internet at the SEC's website at <http://www.sec.gov>, at AGL's website at <http://www.assuredguaranty.com>, or will be provided upon request to Assured Guaranty Municipal Corp.: 1633 Broadway, New York, New York 10019, Attention: Communications Department (telephone (212) 974-0100). Except for the information referred to above, no information available on or through AGL's website shall be deemed to be part of or incorporated in this Official Statement.

Any information regarding AGM included herein under the caption "BOND INSURANCE – Assured Guaranty Municipal Corp." or included in a document incorporated by reference herein (collectively, the "AGM Information") shall be modified or superseded to the extent that any subsequently included AGM Information (either directly or through incorporation by reference) modifies or supersedes such previously included AGM Information. Any AGM Information so

modified or superseded shall not constitute a part of this Official Statement, except as so modified or superseded.

Miscellaneous Matters

AGM makes no representation regarding the Series 2016 Bonds or the advisability of investing in the Series 2016 Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented under the caption “BOND INSURANCE”.

Rights of AGM

AGM shall be deemed the sole holder of the Insured Bonds for the purpose of exercising any voting right or privilege or giving any consent or direction or taking any other action that the holders of the Insured Bonds are entitled to take pursuant to the Bond Ordinance (including the exercise of remedies thereunder) pertaining to (i) defaults and remedies and (ii) the duties and obligations of the Trustee. Any amendment, supplement, modification to, or waiver of, the Bond Ordinance or any other transaction document, including any underlying security agreement that requires the consent of holders of Insured Bonds or adversely affect the rights of AGM shall be subject to the prior written consent of AGM. AGM is included as a third party beneficiary to the Bond Ordinance.

THE REGIONAL WATER SYSTEM

The Regional Water System draws its water from the largest fresh water source in North America, the Great Lakes system, with Lake Huron to the north, the Detroit River to the south and Lake St. Clair to the east. With access to nearly 2 billion gallons of high quality source water and with three separate intakes, the Authority has highly reliable and more than sufficient source water for current and projected demands.

The major components of the Regional Water System include three intake facilities, five treatment plants, an extensive conveyance system consisting of over 800 miles of transmission mains throughout the service area, 19 booster pumping stations and 32 water storage reservoirs (14 at the water treatment plants and 18 at booster stations) located throughout the Regional Water System. Water flow and pressure throughout the Regional Water System are monitored and controlled by a Systems Control Center housed in the Authority’s Central Services Facility.

Physical Facilities

Intake Facilities

The Regional Water System’s three intake facilities are listed below and, in the opinion of the Authority, are generally in adequate to good working order and repair.

- The Lake Huron intake, located in Lake Huron, approximately 5 miles north of Port Huron and 5 miles into the lake, was placed in operation in 1974. This intake supplies raw water through a tunnel to the Lake Huron water treatment plant.
- The Belle Isle intake, located at the eastern end of Belle Isle where Lake St. Clair flows into the Detroit River, was placed in operation in 1931. This intake supplies raw water to the Water Works Park, Springwells and Northeast water treatment plants.

- The Fighting Island intake and tunnel, located under the Detroit River on the Canadian side just west of the northern end of Fighting Island, was placed in operation in 1964. This intake supplies raw water to the Southwest water treatment plant.

Water Treatment Plants

Raw water from the intake facilities is treated at the Regional Water System’s water treatment plants, which includes screening, filtering, bacteria control, and taste and odor control. Each of the five water treatment plants in the Regional Water System was constructed with the capability to treat the water in accordance with federal requirements under the Safe Drinking Water Act. In the opinion of the Authority, based upon physical evaluations conducted by its consultants, no significant improvements to the treatment plants are presently required to meet such requirements. See “SERVICE AREA AND CUSTOMERS—Environmental Matters” below. In addition, each treatment plant is equipped with its own laboratory facilities for the examination of drinking water which are recertified periodically (every three years) by the Michigan Department of Public Health. The treatment plants are more particularly described in the following table. For capital improvements planned for each plant, see “THE MASTER PLAN AND THE CAPITAL IMPROVEMENT PROGRAM—Capital Improvement Program and Planning Process and —The CIP financing Plan.”

Water Treatment Plants

Plant	Placed in Operation	Rated Capacity (mgd)
Lake Huron	1974	400
Southwest	1964	240
Northeast	1956	300
Springwells ⁽¹⁾	1931/1958	540
Water Works Park	2003	240

⁽¹⁾ A major addition was completed in 1958, doubling the capacity of such water treatment plant by adding a new reservoir, sedimentation basin and filtration facility. Filter upgrades at Springwells limit plant capacity to 300 million gallons per day (“mgd”) until construction is complete, which is currently expected to occur or about September 2017.

Water Delivery System

The Authority owns and maintains all transmission mains (24 inches to 120 inches in diameter) within the City limits and certain transmission mains throughout the wholesale service area. The Regional Water System connects throughout the wholesale service area with the transmission and distribution mains owned and operated by the wholesale municipal customers and the City of Detroit.

The transmission system is laid out to provide adequate pressures that are reinforced by use of booster stations and reservoirs as necessary. The transmission system is interconnected and flow of water can be controlled, particularly in emergency conditions, to flow in either direction by opening or closing valves. Water pressures can be boosted to overcome any losses due to an emergency situation.

Monitoring Facilities

The Water System Control Center located in the Authority’s Central Services Facility controls and monitors the transmission of water throughout the Regional Water System. Operators in the Control Center can remotely control the pump stations at the treatment plants and the 19 booster stations to adjust flow and pressure requirements to meet the changing demands of customers. Recent improvements to the

Control Center have been undertaken as part of an instrumentation and computerization project included in the CIP.

THE MASTER PLAN AND THE CAPITAL IMPROVEMENT PLAN

Regional Water System Master Plan

The Water Master Plan Update was accepted by GLWA on August 24, 2016. This plan was materially completed in 2015 (the “2015 Water Master Plan Update” or the “Update”) with final closeout in 2016. Customers were engaged in the preparation of the 2015 Water Master Plan Update. This provided broader perspective utilizing the region’s entire infrastructure for public benefit to leverage existing infrastructure before investing in new infrastructure. The 2015 Water Master Plan Update has been utilized to develop the amended Regional Water System CIP.

The 2015 Water Master Plan Update, which covers a period of 20 years, instead of 50 years in prior master plans, recognizes the national trend of declining instead of growing demand. A key focus was to establish a strategic infrastructure and operating plan associated with this reality. The Update recommended right-sizing the capacity of the Regional Water System based on the current lower projections of population and water volumes. The 2015 Water Master Plan Update found that the Authority’s combined water treatment plant design capacity was estimated to be over 60% greater than the forecasted 20-year water demands. The total rated capacity of the existing five water treatment plants is 1.7 billion gallons per day. The 2015 Master Plan Update identified likely maximum demands in the range of up to 1.0 billion gallons per day during the 20-year planning period. This provided the rationale to evaluate- the possibility of repurposing one or more water treatment plants to strategically align capacity and service requirements and planning for structural de-rating of capacity as warranted at the remaining four water treatment plants. The 2015 Master Plan Update recommended converting the existing Northeast Water Plant into a storage and pumping facility, thereby eliminating the need to invest in improvements that would otherwise be required to maintain rated capacity, and investing in the four remaining water treatment plants.

The 2015 Water Master Plan Update is designed to provide the system with flexibility to meet multiple growth scenarios and regulatory changes in the future, furthering GLWA’s sustainability goals. Realignment water treatment plant capacity with forecasted demands will require additions and modifications to the existing water transmission system. The first five years of the 2015 Water Master Plan Update contain several capital projects related to the additions and modifications to the existing water transmission system, several of which are in the Fiscal Year 2017-21 Regional Water System CIP. An example of the Update’s financial benefits is an estimated \$400 million of capital cost avoidance. In August 2016, the 2015 Water Master Plan Update was further updated to decommission and repurpose the Northeast Water Treatment Plant, provide a new transmission system serving the Authority’s northeast service area and add enhanced water system redundancy and long term serviceability to a large (96 inch) water main through completion of a repair, relocation and isolation valve installation project for that water main.

System Optimization Guidelines

As noted above, the Regional Water System currently has excess capacity due to changing trends in water consumption that are occurring both nationally and regionally, as well as the fact that the existing system was designed for a larger projected population than it now serves or is projected to serve in the near future. Along with the Authority’s implementation of the 2015 Water Master Plan Update recommendations in conjunction with the Regional Water System CIP to right size capacity, the Authority is pursuing the addition of new customers to the Regional Water System. To guide the Authority’s management team as it engages in discussions with prospective new customers, the Authority has established system optimization guidelines to ensure a thorough analysis of system and customer

impacts is undertaken prior to seeking GLWA Board approval for the addition of new customers to the system. These system optimization guidelines evaluate the prospect of additional customer relationships from a regional perspective and assess the impacts any prospective additions would have on seven key elements: water quality, service reliability, existing customers, the efficient leveraging of existing assets, existing planning documents, the system’s financial stability and the region’s economic benefits.

Capital Improvement Program and Planning Process

The original Fiscal Year 2017 Regional Water System CIP was approved by the GLWA Board on May 25, 2016. The CIP is dynamic and requires continual review and modification during the course of each year. In preparation for issuance of the Series 2016 Bonds, the Regional Water System CIP has been updated to reflect modified plans and individual project activity subsequent to approval of the original Regional Water System CIP. An amended Fiscal Year 2017-2021 Regional Water System CIP was approved by the GLWA Board on September 14, 2016. The amended Regional Water System CIP reflected the changes in the 2015 Water Master Plan Update as well as some additional optimization of select projects. The projected expenditure schedule in the amended Regional Water System CIP is presented in the following table.

Regional Water System Capital Improvement Program Projected Expenditure Schedule – Fiscal Years 2017 through 2021

<u>Category</u>	<i>Fiscal Year Ending June 30,</i>					<u>Total</u>
	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	
	\$	\$	\$	\$	\$	\$
<u>Water Production</u>						
Water Works Park	2,475,000	5,875,000	27,900,000	20,500,000	0	56,750,000
Springwells	28,753,000	28,630,000	33,000,000	25,600,000	10,300,000	126,283,000
Northeast	100,000	880,000	0	0	0	980,000
Southwest	3,853,000	3,160,000	2,150,000	900,000	0	10,063,000
Lake Huron	6,300,000	17,278,000	18,505,000	6,203,000	200,000	48,486,000
General Water Treatment	29,944,000	37,449,000	38,936,300	24,333,300	10,833,300	141,495,900
Subtotal Production	71,425,000	93,272,000	120,491,300	77,536,300	21,333,300	384,057,900
<u>Water Delivery</u>						
Water Transmission System	45,137,000	37,656,000	62,900,000	92,250,000	84,700,000	322,643,000
Pumping Station & Reservoirs	5,141,000	5,468,000	6,000,000	2,900,000	2,500,000	22,009,000
Subtotal Delivery	50,278,000	43,124,000	68,900,000	95,150,000	87,200,000	344,652,000
Computer Systems	3,828,000	3,748,000	3,425,000	1,000,000	1,050,000	13,051,000
General Purpose	4,701,000	4,701,000	425,000	250,000	250,000	10,327,000
Subtotal General	8,529,000	8,449,000	3,850,000	1,250,000	1,300,000	23,378,000
TOTAL	130,232,000	144,845,000	193,241,300	173,936,300	109,833,300	752,087,900

GLWA has recently implemented a new CIP scoring tool to provide a standardized method of prioritizing projects for the annual GLWA CIP development. This scoring tool attempts to quantify a project ranking to allow for non-subjective prioritization. Until a formal asset management program is implemented at an asset level, this method will standardize and prioritize projects to ensure the effective and efficient use of public funds by establishing a list of projects for inclusion in the CIP in the order of highest to lowest priority. The CIP development process results in a prioritized list of projects with anticipated CIP year, schedule and overall cost for inclusion within the official five-year CIP.

Currently, projects to be considered for inclusion in each year of the CIP are identified by the subject matter expert engineers. These engineers utilize available institutional knowledge, data, operations and maintenance reports, need and condition assessments and master plans to identify the project need.

The following criteria have been identified to capture GLWA's overall strategy related to the probability and consequence of failure associated with each identified project: (i) condition, (ii) performance, (iii) regulatory, (iv) safety, (v) public benefit, (vi) financial and (vii) efficiency.

Each project will be scored by the project sponsor during the development of a formal Business Case Evaluation form and by a Review Committee. The Review Committee is comprised of a core group of members from leadership in Financial Service Area, Planning Service Area and from the business unit associated with Water or Wastewater Service Area. To facilitate transparency in this process, a member from one or more of GLWA's customer communities also participate as scoring members of the Review Committee.

The CIP Financing Plan

The Authority uses an incremental method of capital project funding rather than funding all projects in advance. The Authority's capital financing strategy is designed to align capital project financing sources with program requirements in a framework that balances multiple goals, including to: (i) recover the costs of capital investment over the useful lives of the capital assets; (ii) minimize the impact of the capital programs on water service charges; and (iii) protect and enhance the Authority's financial position.

The amended Regional Water System five year CIP is estimated to cost \$752 million. Of this amount, approximately \$226 million is planned to be financed by the proceeds from the Series 2016 Bonds. The Series 2016 Bonds are also providing \$57 million of proceeds to be transferred to the DWSD Construction Fund to finance improvements to the DWSD Local Water System. While the Authority is responsible for the debt service on bonds issued to finance capital improvements to the DWSD Local Water System, the annual principal and interest requirements are included in the revenue requirements assigned to the City of Detroit retail customer class. The Authority expects that approximately \$376 million (net of issuance costs) will be financed with proceeds of Additional Bonds issued during the five-year planning period, and that the balance of the CIP will be financed with funds on hand and with Water System revenues. For planning purposes, these projected Additional Bonds do not include any proceeds to finance expenditures for the DWSD Local Water System, as it is projected that remaining Local Water System improvements can be financed with future Lease Payments and internally generated funds. To the extent that DWSD opts to pursue financing of Local Water System projects through Additional Bonds, these projections would change.

The Authority is in the process of issuing SRF Junior Lien Bonds through the Drinking Water Revolving Fund ("DWRF") to finance approximately \$33 million of CIP expenditures for capital improvements to the Local Water System for DWSD. Loans totaling approximately \$16 million closed in September 2016 and an additional \$17 million loan is scheduled to close in March 2017, as reflected in the below table. Proceeds from these loans are shown to be entirely transferred to the DWSD Construction Fund. While the Authority is responsible for the debt service on these Junior Lien Bonds, the annual principal and interest requirements are included in the revenue requirements assigned to the Retail Water Customers. The Authority does not currently anticipate any DWRF proceeds to finance capital improvements to the Regional Water System. See APPENDIX I – FEASIBILITY CONSULTANT'S REPORT.

**Regional Water System Capital Improvement Program
Projected Funding Sources**

	Fiscal Year Ending June 30,					Total \$
	2017 \$	2018 \$	2019 \$	2020 \$	2021 \$	
Existing Improvement and Extension Funds (a)	68,000,000					68,000,000
Existing Construction Funds (a)	13,000,000					13,000,000
Current Revenues	52,219,200	47,899,500	55,599,400	49,447,800	53,397,600	258,563,500
Bond Proceeds (b)	917,805,000	0	200,000,000	200,000,000	0	1,317,805,000
Original Issue Premium	139,113,300	0	0	0	0	139,113,300
Available Debt Service Payment Funds	16,458,900					16,458,900
Available in Debt Service Reserve Funds	25,163,000					25,163,000
less: Defeasance Requirements for Refunded Bonds	(811,343,600)	0	0	0	0	(811,343,600)
less: Deposit to DWSD Construction Fund (c)	(56,995,800)	0	0	0	0	(56,995,800)
less: Bond Reserve Requirements (d)	0	0	(10,700,000)	(10,700,000)	0	(21,400,000)
less: Issuance Expenses (e)	<u>(4,317,800)</u>	<u>0</u>	<u>(1,300,000)</u>	<u>(1,300,000)</u>	<u>0</u>	<u>(6,917,800)</u>
Net Bond Proceeds Available	225,883,000	0	188,000,000	188,000,000	0	601,883,000
State Drinking Water Revolving Fund Loans (f)	16,000,000	17,000,000	0	0	0	33,000,000
less: Transfer to DWSD Construction Fund (f)	<u>(16,000,000)</u>	<u>(17,000,000)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>(33,000,000)</u>
Net State DWRP Financing for Authority	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Funding Sources (g)	359,102,200	47,899,500	243,599,400	237,447,800	53,397,600	941,446,500

- (a) Estimated balance available June 30, 2016. (Applies only to Fiscal Year 2017).
- (b) The Series 2016 Bonds (in 2017). Also includes projected additional future bonds in 2019 and 2020.
- (c) Includes amounts from the Series 2016 Bonds to provide funding to the DWSD CIP for 2017 and 2018. Assumes that no DWSD CIP financing will be required from additional future bonds.
- (d) Includes amount required from future bond proceeds to fund debt service reserve fund.
- (e) Includes Underwriter's Discount and Bond Insurance premium.
- (f) All currently contemplated DWRP Loans are related to capital improvements to the DWSD Local System.
- (g) The difference between the total amount available to finance the capital program and the cost of the program represents funds available to finance the capital program after 2021.

SOURCE: THE FOSTER GROUP, LLC.

Limits on Future Borrowing

If the Regional Water System does not generate sufficient Revenues to pay for the cost of capital improvements to the Regional Water System, or if other funds are not available, additional funds may have to be borrowed. In the event Additional Bonds are issued, such Additional Bonds would, in some cases, increase the debt service requirements to be serviced by the Revenues of the Regional Water System. In order for GLWA to issue Additional Bonds, certain conditions must be satisfied as described in greater detail above in "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2016 BONDS—Issuance of Additional Bonds."

SERVICE AREA AND CUSTOMERS

The Authority currently provides wholesale water services in a service area encompassing 981 square miles and serves all or a portion of eight Michigan counties in southeast Michigan, including Oakland, Macomb, Wayne, Lapeer, Genesee, Washtenaw, St. Clair and Monroe Counties. Approximately 3.8 million people, or approximately 38% of the total population of the State of Michigan, live in the Authority's water service area. Suburban customers comprise approximately 82% of the population served by the Authority, and the Retail Water Customers comprise the remainder served by the Authority. Under certain circumstances, subject to the Authority's system optimization guidelines, the Authority's water service area may be expanded to include additional communities. The Authority's Customers include communities and districts served via wholesale service contracts and the City retail customer class served via the terms of the Water and Sewer Services Agreement.

Wholesale Customers

The Customers of the Regional Water System include 127 communities served through 87 wholesale water service contracts with municipal and other public entity customers, as well as the City of Detroit, which is served by the Authority pursuant to the Water and Sewer Services Agreement. The first wholesale customer communities to negotiate service agreements under the Authority's model contract did so in 2008. To date, model contracts for 78 of the 87 current wholesale customers have been negotiated, approved, and are in effect. Of the other 9 wholesale customers, 7 are served under the former contract structure, 2 are being served via emergency service contracts, and Genesee County is being served without any formal contract. The 78 customers served by the new model contracts comprise over 91% of total billed revenues from Water Regional Water System wholesale customers (exclusive of Detroit). Since 2015, the Authority has negotiated new model contracts with the communities that formerly made up the Greater Lapeer County Utilities Authority consisting of Village of Almont, City of Lapeer, the City of Imlay City and Mayfield Township. Negotiations are expected to be completed with Imlay Township by December 2016. The Authority has also completed a long term contract with the City of Riverview, which had previously been served under an expired contract. The City of Detroit is not a "wholesale" customer. Instead, the City of Detroit, acting as agent for the Authority in serving the Retail Customers through the DWSD, is the largest customer of the Water System. That relationship is further defined by the Water and Sewer Services Agreement which is consistent with the structural provisions within the Lease and related agreements. The Authority may revoke or terminate its appointment of the City as agent for the Authority if the City fails to perform its duties, obligations or administrative functions in accordance with the Water and Sewer Services Agreement. See APPENDIX V – SUMMARY OF THE LEASE and APPENDIX VII – SUMMARY OF THE WATER AND SEWER SERVICES AGREEMENT.

The model water service contracts generally provide for (i) delivery of water by the Authority to the wholesale customer at designated metered points at specified rates of flow and pressure and (ii) payment by the wholesale customer for all water supplied at reasonable charges established by the Authority. The Authority is responsible for meeting all water quality requirements at the designated metered points. The wholesale customer is solely responsible for distributing water from the points of delivery to its retail customers, for local billing, collection and rate setting.

The model contracts have a 30-year initial term and automatically renew for an additional 10-year term unless a party to the contract provides written prior notice of intent to terminate at least 5 years prior to the end of the then-current contract term. In the event of an early termination, the model contract provides that wholesale customers are liable to GLWA for the payment of any costs incurred by the Authority related to the provision of services to the customer, unless the termination is for cause, in which case GLWA has cure rights. The model contract provides that GLWA has no responsibility for distributing, operating, repairing, replacing or maintaining any portion of the customer's retail system, that GLWA shall be the sole supplier of service to the customer's service area and that the customer is prohibited from commingling Authority water with water from any other source without the prior approval of GLWA.

The model contracts also provide that the Water Technical Advisory Committee (the "TAC"), established to facilitate a cooperative working relationship between GLWA and its customers, will remain in place for the contract term. In addition, the model contracts include other provisions required for the orderly operation of an integrated water supply and distribution system such as the following: (i) restrictions on redistribution outside the limits of the particular municipality or other public entity without the consent of the Authority; (ii) measurement of water furnished by meters; (iii) the metered flow of water is the basis for billing; (iv) prohibition against combining of Regional Water System supplied water with water from any other source without prior written approval of the Authority to ensure a uniform quality of water throughout the area; (v) municipal acceptance of the Authority's standards for construction of distribution mains and Authority approval of construction plans therefor to ensure a

uniform standard throughout the area; (vi) Authority commitments regarding notification of rate changes; (vii) payment and late payment terms; (viii) delineation of maintenance responsibilities; (ix) specific water pressure commitments by the Authority; and (x) maximum day, peak hour and annual volume commitments by the wholesale customer.

The following table provides information about the contracts of the ten largest wholesale customers. For unaudited fiscal year ended June 30, 2016, these customers provided approximately 37% of the gross operating revenues of the Regional Water System, and accounted for almost 47% of billed revenue to wholesale customers.

Summary of Wholesale Water Supply Contracts

	Total Billed Flow (Mcf) ^(b) Fiscal Year 2016	Total Billed Revenue Fiscal Year 2016	Contract Start Date ^(a)
Southeastern Oakland County Water Authority	\$1,323,226	\$22,846,983	2009
North Oakland County Water Authority	941,272	22,585,698	2015
Genesee County (<i>not including Flint</i>)	542,322	17,231,935	N/A
Sterling Heights	636,214	14,678,915	2008
Livonia	521,496	12,809,124	2009
Shelby Township	417,081	12,689,582	2010
Troy	480,712	12,365,922	2008
Canton Township	351,017	12,319,875	2008
Novi	304,311	11,869,865	2009
Macomb Township	338,355	10,103,536	2009

(a) Initial approval date of the contract.

(b) "Mcf" equals thousand cubic feet.

There are significant barriers to leaving the Water System, including (i) the geology of the area not supporting a substantial water supply by subsurface wells, (ii) a natural supply of raw water coupled with the existing capital facilities of the Water System, and (iii) longstanding municipal relationships extending contractually for many years. Except as noted below, the Authority has no material competition in the Southeastern Michigan region.

In 2010, Genesee County and the City of Flint (along with other neighboring communities) formed the Karegnondi Water Authority (the "KWA"). In 2013, the Authority terminated its contract with Flint but continued to supply water to Flint. In May 2014, Flint began operating its own water treatment plant utilizing the Flint River as its raw water source and immediately began experiencing water quality issues. On October 16, 2015, Flint signed a nine-month contract with the Authority for water service. At that time, Flint deposited \$10 million with the Authority as an estimated prepayment for service over the term of the contract. On July 11, 2016, Flint signed a Letter of Intent with GLWA to extend the term of the contract for water services through June 30, 2017. Pursuant to that contract extension, Flint was required to transfer additional moneys in two installments for deposit by the Authority into the prepayment fund established in connection with the original nine-month contract. On July 13, 2016, Flint deposited the first installment of \$5.9 million into the prepayment fund held by the Authority. On a monthly basis, the Authority draws down from this deposit the amount equal to the amount invoiced to Flint. If it is determined that moneys in the prepayment fund may be insufficient to cover the next invoice, Flint is required to replenish the prepaid funds within 30 days. At the conclusion of the contract, if any prepaid funds remain, those funds will be returned to Flint. As a result of this contract extension,

additional revenues of approximately \$13.3 million are projected to be realized by the Authority in Fiscal Year 2017. **The projections contained in this Official Statement do not reflect any revenues associated with the sale of water to Flint after June 30, 2017.**

Genesee County, which previously purchased water from the Authority through the Flint contract, is now purchasing water directly from the Authority. The parties engaged in negotiations to establish a formal long-term service contract, but those negotiations have been dormant for over a year. The Authority expects that if Genesee County completes construction of a water treatment plant in mid-2017 as currently planned, Genesee County will no longer be a customer of the Authority. **The projections included in this Official Statement assume the receipt of full service revenue from Genesee County through June 30, 2017, and none thereafter.**

The following table for historical water sales and non-revenue water presents water volume in thousands of cubic feet (“Mcf”) for suburban wholesale Customers, for the Retail Water Customers, and for the Regional Water System as a whole, together with total water production and non-revenue water volume. As is common for all large water systems, the Regional Water System experiences a differential between the quantity of water produced by the treatment plants during the Fiscal Year and the quantity of water billed to customers over the same period, and the difference is referred to as “non-revenue water.” Non-revenue water results from a variety of factors such as the range of accuracy of production and retail meters, losses due to leaks or major breaks in the transmission and distribution systems, unmetered water that is used for fire protection, and the accuracy of estimates for unmetered use. The Authority believes that improvements in the accuracy of the reported production figures may reduce the level of non-revenue water. Production at some of the water plants is not metered, but rather is estimated based on pump curves. These data continue to be reviewed, and the Authority has initiated efforts to measure production figures and refine production estimating techniques.

Historical Water Sales and Non-Revenue Water

FY	Water Sales			Total Water Produced Mcf	Non-Revenue Water	
	Suburban Wholesale Mcf	Detroit Retail Mcf	Total Mcf		Volume Mcf	As a % of Production
2012	16,280,300	3,903,100	20,183,400	27,219,500	7,036,100	25.8%
2013	15,687,900	3,660,300	19,348,200	26,832,800	7,484,600	27.9%
2014	14,778,500	3,410,600	18,189,100	26,088,800	7,899,700	30.3%
2015	13,547,000	3,173,700	16,720,700	23,238,000	6,517,300	28.0%
2016	14,730,400	3,086,400	17,816,800	23,580,700	5,763,900	24.4%

Irrespective of the accuracy of the reported production levels, mitigating the reported level of non-revenue water is a goal of the Authority and of DWSD with respect to the Local Water System. The 2015 Water Master Plan Update supports the current efforts of plant production meter rehabilitation now underway and identified in the CIP. To date, there has been progress on the plant production metering design for Water Works Park, Northeast and Southwest water treatment plants. A contract has been awarded to an engineering consultant for design work associated with the rehabilitation of the water production flow meters. The 2015 Water Master Plan Update proposed a 20-year capital improvement program that identified four programs: a program for plant production metering; a program for non-revenue water reduction, including ongoing water audits and other operational initiatives, a district metered area approach to leak detection and management, and distribution system inspection, rehabilitation and replacement; a program for new wholesale metering for the cities of Dearborn, Highland Park and Detroit; and a program for Completion of Automatic Meter Reading in Detroit.

Future reports of non-revenue water for Fiscal Year 2017 and beyond will reflect the new arrangement between the Authority and the City, and the fact that the Authority is a provider of wholesale water service. For instance, the water use allocated to the Retail Water Customers includes an estimate of unaccounted-for water within the Local Water System and this amount is included in the basis for allocating revenue requirements to the Retail Water Customers. As such, it will not be included in non-revenue water.

Service Charges to Customers

The Authority's water service charges and charges to Retail Water Customers under the Water and Sewer Services Agreement are reviewed and adjusted annually. The model contracts with wholesale customers typically provide, and the Water and Sewer Services Agreement provides, that rates be reasonable in relation to the costs incurred. The Authority's staff and outside consultants review and make recommendations on charges for water service. Prior to Fiscal Year 2016, the Water System's charges were determined by the "utility basis" method, which is recommended by the American Water Works Association for municipally-owned utilities providing services to metropolitan areas and which the Water System was required to use under Michigan law. Under this method, the revenue requirement is comprised of three elements of cost: operation and maintenance expenses, depreciation expense and a return on the rate base. In formulating charges, distinctions were made between Retail Water Customers and the various wholesale municipal customers based on the differences in the cost of serving each class of customer.

The service charges adopted by DWSD for Fiscal Year 2016 were developed during negotiation of the Lease and represent the first year that formally froze the return on rate base that the City received in Fiscal Year 2015 (\$20.7 million) and provides that credit to the Authority's determination of rates and charges to the Retail Water Customers in the City. This provision was also applied in determining the Fiscal Year 2017 water service charges approved by the Authority, which became effective July 1, 2016. In effect, the \$20.7 million annual adjustment is now a contractual agreement over the 40-year term of the Lease and not directly representative of any application of the utility basis nor differential rates of return.

The schedule of charges for each of the wholesale customers consists of a fixed monthly charge and a commodity charge applied to monthly metered water sales. While the overall methodology used to determine charges for each customer is uniform, the service charge schedule for each customer is unique, reflecting the specific volumes, peak demands, and other demographic information in their individual contracts. The Fiscal Year 2016 wholesale water charges reflected a modification to the portion of the overall revenue requirement collected from each of the charge elements. These charges were designed to recover 60% of the revenue requirement via fixed monthly charges (increased from approximately 40%), with the other 40% generated by commodity charges (down from approximately 60%). The Fiscal Year 2016 charges also reflected a more conservative approach to estimating water sales volumes for each customer. Instead of basing estimated water sales on the long-term planning amounts contained within the customer contracts, estimated water sales volumes for Fiscal Year 2016 were calculated based on the 24-month average for each customer community ending September 2014. This time period covers two of the wettest summers on record. The modifications implemented for Fiscal Year 2016 were made to further improve the alignment between cost of service allocation and cost recovery and to stabilize billings to customers and revenues to DWSD. The significance of this change in aligning projected sales with actual sales is evident for Fiscal Year 2016 charges (effective July 2015). The actual reported billings to wholesale customers during Fiscal Year 2016 indicate that the service charge structural reforms have produced initial success.

Based on actual billed amounts for wholesale water customers for Fiscal Year 2016, the wholesale customer revenues exceeded budgeted amounts for the first time this century. Billed revenues were 100.8% compared to budget and billed volumes were at 101.2%, producing a positive revenue variance of approximately \$2.4 million compared to budget. This achievement is the direct result of

GLWA working with its customers to help them realize that changes in local and national usage trends needed to be addressed.

The modified approach to service charge development noted above was continued for the Fiscal Year 2017 wholesale service charges and charges to Retail Water Customers under the Water and Sewer Services Agreement, which were approved by the GLWA Board and became effective July 1, 2016. These service charges were set at levels expected to generate 4.3% more revenue than the previous year’s wholesale service charge. The 4.3% revenue adjustment for Fiscal Year 2017 represents a 4.0% increase in the overall budget, and an additional amount to address a reduction in expected sales for Fiscal Year 2017. The 4.3% figure is an average for the wholesale Customer class at large. The impact of the Fiscal Year 2017 charges on individual Customers is subject to additional factors, including changes in contract demands, cost allocation results, and changes in sales volumes.

See “AUTHORITY FINANCIAL OPERATIONS—Projected Operations for Fiscal Year 2017 through 2021.”

The following table presents a summary of the annual changes in the effective average wholesale water service charges for the last ten years.

Change in Effective Wholesale Water Service Charges

Date of Implementation	Average Annual Increase
7/11/2007	5.1%
9/3/2008	8.9%
7/1/2009	6.4%
7/1/2010	5.5%
7/1/2011	9.1%
7/1/2012	7.9%
7/1/2013	3.9%
7/1/2014	3.9%
7/9/2015	11.3%
7/1/2016	4.3%

Note: Reflects change in effective average unit cost of service for all customers

Customer Collaboration Efforts and Customer Outreach

GLWA identifies its role in the region as the water service provider of choice and seeks to work in partnership with its customers to deliver the highest quality water services it can provide. The Authority has established a policy of collaborating with its wholesale customers and with DWSD as a top GLWA priority. The Authority collaborates with community representatives through the TAC, a mechanism that has proven effective in the past and that is embedded in the GLWA’s model contract. GLWA’s customer collaboration efforts are designed to ensure that its wholesale customers and GLWA’s managers, operators and engineers continue to address system planning and service issues through the outreach and TAC process.

The Authority maintains an online portal as a resource for its many collaborative work groups and an information source for customers as well as local elected officials throughout GLWA’s service

area. In addition GLWA has added a staff member entirely dedicated to wholesale customer service and specifically to customer outreach.

Water Residential Assistance Program

The Water Residential Assistance Program or “WRAP” is the first program of its kind in Michigan and one of only a few models of sustainable assistance plans in the country, providing assistance to qualifying low-income customers in the GLWA’s service area. The program is funded by GLWA at an amount equal to 0.5 percent of Revenues with the initial Fiscal Year 2016 funding level of \$4.6 million combined for water and sewer services.

The WRAP is available to all qualified residents who receive water and/or sewer service from GLWA. It is anticipated that an estimated 2,500 to 5,000 retail customers will receive assistance from WRAP annually. Eligible residential customers with a past due bill and/or who are in active shut off can receive assistance with paying down arrears and receive \$25 toward monthly bill payment assistance annually up to \$1,000. High volume water users can receive a one-time home audit and home water conservation services up to \$1,000. Maximum annual assistance per household is \$2,000. To participate in WRAP an applicant must have household gross incomes at or below 150% of the Federal Poverty income thresholds. Clients with water usage at or above 120% of the average residential usage are eligible to participate in a water audit and install water conservation measures. WRAP participants are also encouraged to participate in both financial coaching and water conservation workshops as well as other support services.

Environmental Matters

The operation of the Regional Water System is subject to extensive regulation pursuant to the federal Clean Water Act, the Clean Air Act, the Safe Drinking Water Act, the Michigan Natural Resources and Environmental Protection Act, and the administrative rules and regulations that have been promulgated pursuant to these statutes. These programs affect many facets of the Regional Water System. One such program is the GLWA optimized corrosion control treatment program. In 2015, after experiencing issues related to a lack of corrosion control, Flint reconnected to the Regional Water System to take advantage of the corrosion control treatment program. The corrosion control treatment program impacts all plumbing, whether the plumbing is in a private home, business or school.

GLWA monitors water quality parameters within the GLWA regional water distribution system according to the Safe Drinking Water Act’s Lead and Copper Rule. The parameters for lead and copper are monitored at the water treatment plants and within the GLWA water distribution system twice per year. Monitoring for these parameters ensures that the corrosion control treatment protective coating remains intact. In addition, GLWA regularly monitors lead and copper levels in residential plumbing once every three years. GLWA is on reduced monitoring due to the optimized corrosion control treatment program. GLWA has been in compliance since corrosion control treatment was installed. GLWA is not responsible for monitoring, operating or maintaining the Local Water System or the retail distribution and storage facilities of its wholesale customers.

In light of the unprecedented water quality issues that have occurred in Flint and across the country, GLWA established an ad hoc Water Quality Workgroup entitled “Water Quality Matters” to bring together technical experts and representatives within its customer communities, sharing leading best practices and developing public education materials. Because GLWA is engaged with the water sector regulatory community and with national associations, the initial focus of the Workgroup was to communicate information from these two forums to GLWA’s Customer community. As the circumstances in Flint progressed, the Workgroup’s focus turned to developing materials for use and instruction by the local communities which convey technically sound, thorough and consistent message on the approaches to minimizing lead exposure to the end users. The Workgroup recently developed a

presentation suitable for use at local council and board meetings to communicate important information on the role of GLWA as the regional wholesale water provider and the role of the local water service provider on the topic of lead and drinking water.

The Authority is in material compliance with all existing permits relating to the operation of the Regional Water System. Federal, state and local standards and procedures that regulate the environmental impact of the Regional Water System are subject to change. These changes may arise from continuing legislative, regulatory and judicial action regarding such standards and procedures. Consequently, there is no assurance that facilities in operation will remain subject to the regulations currently in effect, will always be in compliance with further regulations or will always be able to obtain all required operating permits. An inability to comply with environmental standards could result in reduced operating levels and fines. Legislative, regulatory, administrative or enforcement actions involving environmental controls could also adversely affect the operation of the facilities of the Regional Water System. For example, if property owned or operated by GLWA is determined to be contaminated by hazardous materials, GLWA could be liable for significant clean-up costs even if it were not responsible for the contamination.

AUTHORITY FINANCIAL OPERATIONS

The Authority's financial operations incorporate policies adopted by the GLWA Board, provisions included in the Lease, and administrative policies. Key financial policies and parameters are described below.

It should be noted that the summary results of financial operations presented here reflect three distinct time periods as a result of the Authority's operational effective date of January 1, 2016. First, Fiscal Years 2011 through 2015 represent the prior DWSD operational results through June 30, 2015 for which the Authority assumed all financial obligations secured by Net Revenues of the Water System, all cash balances and investments (except for one month's operations and maintenance expense for the Local Water System), and all other assumptions identified in the Lease. Second, Fiscal Year 2016 presents a transitional year where the financial presentation is modified to reflect the calculation of Net Revenues for a twelve month period recognizing that the stand-up of the Authority occurred midway through the Fiscal Year. Third, the Authority's first biennial budget reflects twelve months of operations for each Fiscal Year.

Debt Management Policy

The Authority's Debt Management Policy was adopted by the GLWA Board on December 9, 2015. The goal of the policy is to ensure that financings undertaken by GLWA satisfy clear objective standards which allow it to protect its financial resources in order to meet its long-term capital needs and comply with the provisions of the Bond Ordinance. The policy provides guidance on the types and structures of debt instruments and the methods of sales to be considered. The policy also specifies the selection process of underwriters and other professionals for debt transactions. In addition to addressing the sale of debt, the policy also demonstrates the Authority's goal to provide debt management activities such as timely continuing disclosure filings and rating agency communications that will help the Authority to maintain and improve its credit ratings to reduce the future cost of capital. A copy of the Debt Management Policy can be found at glwater.org/finances.

Investment Policy

The Authority's investment policy was adopted on October 22, 2015 and amended on September 14, 2016. Funds in excess of current Regional Water System requirements are invested by the Authority in accordance with Michigan law. The Authority may invest in direct obligations of the United States, obligations of an agency or instrumentality of the United States, repurchase agreements, mutual funds that

invest solely in such government obligations and repurchase agreements, certain grades of commercial paper, bankers acceptances of United States banks, and certificates of deposit, savings accounts or depository receipts of savings and loan associations or member banks of the Federal Deposit Insurance Corporation. This policy was amended recently to add Certificates of Deposit Account Registry Service as an eligible investment.

The investment policy purpose is to endeavor to accumulate a pool of assets sufficient to build capital for future use with the corresponding obligations to support near-term and long-term needs of the Authority. The investment policy attempts to maintain and protect investment principal while striving to maximize total return on the portfolio consistent with risk limitations, pursuant to guidelines set forth in Act 20, Public Acts of Michigan, 1943, as amended. The Authority has not experienced material investment-related losses in any Authority-managed funds. As of June 30, 2016, the Water Fund held investments with a total market value of approximately \$335,371,114 and the longest investment had a maturity date of October 30, 2018.

Collections and Delinquencies

Wholesale Customers

Wholesale customers are billed monthly. The late payment charge is 1.5% per month for each month that a bill remains unpaid. Payment of charges to the Authority is not contractually dependent upon collections by the wholesale customers from their respective retail customers. Wholesale customers are responsible for their own retail billing systems. In the event of a wholesale customer delinquency, the Authority has options available to it under the relevant contractual agreement, including the right to early termination costs and to obtain a judgment against the wholesale customer. Except as noted below, delinquencies are limited and often cured in one subsequent billing cycle.

As of June 30, 2016, there were three wholesale customers out of a total of 87 with past due balances of totaling approximately \$3.98 million, of which the City of Highland Park accounted for approximately \$3.4 million. Collection efforts for that account have resulted in legal action as described under “LITIGATION – GLWA Litigation.”

On April 13, 2016, the GLWA Board wrote a letter to the Governor of the State of Michigan describing in detail the Highland Park delinquencies, including the history of Highland Park’s failure to bill its residents for water and sewer services for the past several years and its failure to pay the Authority, in conflict with both its contracts with the Authority and with Highland Park’s own bond covenants in its outstanding State Revolving Fund debt, among other aspects of the matter. The letter also asked for the Governor’s personal intercession in working with GLWA and Highland Park to develop a long-term sustainable solution to the situation. In response to that letter, a representative from the MDEQ has met and continues to meet with the Authority at the Governor’s direction. Highland Park has been issued a Notice of Deficiency by the MDEQ requiring it to develop a plan to address operational issues pertaining to its internal water distribution system. Highland Park has responded to this Notice and the State is reviewing that response for further action.

The Authority continues to supply water to Highland Park on an interim basis as well as provides wastewater treatment services to Highland Park. The Authority and Highland Park recently completed a flow monitoring study which shows that the volume of water flowing to Highland Park from the Regional Water System remains similar to the volume of flow produced by Highland Park’s plant when it last operated in 2012. See “LITIGATION – GLWA Litigation” for more information concerning Highland Park. While this is an ongoing litigation matter, the Highland Park delinquency has not resulted in cash flow problems as sufficient operating capital has been available to the Regional Water System. The Authority has been able to meet its obligations as they come due.

Retail Customers

Information related to City's collections and delinquencies can be found in "THE DETROIT WATER AND SEWAGE DEPARTMENT – Collections and Delinquencies".

4% Revenue Requirement Parameter

In accordance with the Lease, commencing with the Fiscal Year beginning July 1, 2016, the Authority is required to adopt a two-year budget for the Regional Water System for the following two Fiscal Years that sets forth budgeted Revenues and expenses for each such Fiscal Year. The budgeted expenses for each Fiscal Year shall equal the sum of the projected expenses and revenue requirements for the Regional Water System for such Fiscal Year (the "Authority Revenue Requirement"). The Authority Revenue Requirement includes operations and maintenance costs, annual costs of financing capital improvements, debt service, replenishment of debt service reserves, an allotment for revenue-financed capital reserves, Pension Obligation commitments, WRAP funding, and the lease payment to the City for use of the Leased Water Facilities and such additional amounts as may be necessary to satisfy the Rate Covenant.

The Lease provides that the Regional Water System is assumed to experience annual increases in the Authority Revenue Requirement of not more than 4% through the Fiscal Year ending June 30, 2025; provided however, this limitation shall not be applicable if the Authority Revenue Requirement must increase beyond the 4% assumption in order to satisfy the Rate Covenant or to pay the cost of improvements to the Leased Water Facilities, that are required to be made by Applicable Laws. The inaugural biennial budget adheres to this parameter. See "AUTHORITY FINANCIAL OPERATIONS - Fiscal Year 2017 and 2018 Biennial Budget."

Lease Payment

Part of the consideration for the Lease is an allocation of \$22,500,000 per year (the "Lease Payment"), which is funded from a portion of the common-to-all revenue requirements for the Regional Water System. The Water Lease Payment will be retained by GLWA. The Lease Payment will flow through the existing flow of funds under the Bond Ordinance, together with other funding requirements, after payment of Operations and Maintenance Expenses. The Lease Payment will not be treated as an Operation and Maintenance Expense and shall be applied solely, at the City's direction and discretion, to the cost of improvements to the Local Water System (payable after debt service and pension liability payments in the flow of funds), the payment of debt service on Bonds associated with such improvements or the City's share of debt service on Bonds associated with common-to-all improvements. Any Additional Bonds issued by GLWA to finance Regional Water System improvements or Local Water System improvements will be issued by GLWA and will be secured by the Net Revenues.

Legacy Retirement System Obligations of the Authority

Under the Plan of Adjustment, the GRS defined benefit plan (the "GRS Plan") was frozen as of July 1, 2014 and closed to new participants; however, the City retained the responsibility to fund amounts necessary to provide adjusted (reduced) pension benefits to employees and retirees who accrued benefits under the GRS Plan. The Plan of Adjustment required DWSD to make annual contributions to the GRS Plan in the amount of \$42.9 million per year, plus \$2.5 million per year in administrative expenses, combined for both the Water System and the Sewer System, for the nine Fiscal Years beginning on July 1, 2014 and ending on June 30, 2023 (collectively, the "DWSD Pension Obligation") and also required DWSD to pay to the City its allocated share of the BC Note Obligation related to both the Water System and the Sewer System (collectively, the "BC Note Obligation" and together with the DWSD Pension Obligation, the "Pension Obligation"). These annual payment amounts to the GRS were based upon an estimated GRS Plan contribution total of \$408.6 million for the entire nine-year period. Pursuant to the

Plan of Adjustment, after the initial nine-year period through June 30, 2023 is completed, DWSD remains responsible for any unfunded accrued actuarial liability (“UAAL”) of the DWSD Pension Obligation.

Pursuant to the Leases, the Authority assumed the obligation to pay that portion of the Pension Obligation allocable to the Regional Water System (the “Authority Water Pension Obligation”) and the Regional Sewer System (the “Authority Sewer Pension Obligation” and together with the Authority Water Pension Obligation, the “Authority Pension Obligation”) and the City retained the obligation to pay that portion of the Pension Obligation allocated to the Local Water System and the Local Sewer System. The pro-rata allocation of the Pension Obligation between the City and the Authority was established in the adopted Fiscal Year 2017 budget based on certain assumptions regarding historical personnel costs related to the regional and local portions of the prior DWSD System. The allocation was agreed to by the City and the Authority, and such assumptions are subject to further clarification and revision as may be subsequently set forth in a written agreement between the City and the Authority.

The Authority allocates the assumed portions of the Pension Obligation on a pro-rata basis between the Regional Water System and Regional Sewer System. The Authority Pension Obligation will be paid by the Authority from charges to users of the Regional Water System and the Regional Sewer System, respectively.

Under the Plan of Adjustment, in calculating the amount of the DWSD Pension Obligation an assumed investment rate of 6.75% and then-available mortality tables were utilized in calculating the potential size of the remaining liability with respect to the DWSD Pension Obligation as of June 30, 2023, then estimated to be very small, if any. The most recent updated GRS actuarial report, calculated as of June 30, 2014 (the “Actuarial Report”), utilizes an assumed rate of return of 6.75% and updated mortality tables, and sets forth a UAAL for the DWSD Pension Obligation of approximately \$352.4 million, which is approximately \$60 million more than contemplated in the Plan of Adjustment. Based on the Actuarial Report, the Authority currently anticipates a total UAAL for the DWSD Pension Obligation as of June 30, 2023 of between \$100 million to \$125 million, of which the Authority’s share would be between approximately \$70 million and \$88 million. For Fiscal Year 2024, DWSD’s annual contribution is projected to be approximately \$12.7 million in the Actuarial Report, of which the Authority’s share would be approximately \$8.9 million. The remaining share of the UAAL of the DWSD Pension Obligation allocable to the Authority will be monitored on an annual basis and Authority management expects to positively plan for the increased liability over the remaining seven-year period.

The total liability for the BC Note Obligation is approximately \$81 million, with approximately \$58 million allocated to the Authority as noted above. Annual payments required from Authority charges began in Fiscal Year 2016, and average approximately \$2.8 million through Fiscal Year 2024, then increase to an average of approximately \$3.7 million through Fiscal Year 2044. The BC Note Obligation is an obligation of the City for which the Authority makes a payment to the City for its allocable share of certain City of Detroit Financial Recovery Bonds which were issued pursuant to the Plan of Adjustment to satisfy in whole or in part claims relating to the City’s pension obligation certificates and post-retirement health benefits. This liability is a fixed commitment; and it is not expected that it will change in the future.

As required by the Leases, the GRS, the City and the Authority entered into an Agreement re GRS Defined Benefit Plan, dated as of December 1, 2015 (the “Pension Agreement”), in which certain disclosures and calculations are required by the GRS auditors and actuaries related to (i) the DWSD Pension Pool (which is defined in the Pension Agreement to mean that portion of the undivided interest in investments and the pension liabilities of the GRS Plan that is allocated to DWSD retirees, deferred retirees and non-vested members in the Plan of Adjustment), (ii) the DWSD-R Pension Pool (defined to mean that portion of the DWSD Pension Pool that is allocated to DWSD after the Effective Date), and (iii) the Authority Pension Pool (defined to mean that portion of the DWSD Pension Pool that is allocated to the Authority after the Effective Date). This will provide for monitoring the remaining allocable share

of the Authority of the DWSD Pension Pool on an annual basis so that the Authority can incorporate adjustments into its financial plan. Specifically, the Pension Agreement provides that the UAAL for the DWSD Pension Pool as of June 30, 2014 is approximately \$352.4 million and requires the GRS to provide to the Authority each Fiscal Year each of the following reports on or before March 1 following the end of such Fiscal Year:

(1) A summary annual report that will: (A) commencing with the Fiscal Year ending June 30, 2015, continue to track DWSD retirees, deferred retirees and active and inactive vested and non-vested members, pension benefits paid and pension liabilities accrued separately from other GRS members; and (B) commencing with the Fiscal Year ending June 30, 2016, continue to track DWSD, and then within DWSD to DWSD-R and the Authority, pursuant to written direction from DWSD-R and the Authority, the retirees, deferred retirees and active and inactive vested and non-vested members, pension benefits paid and pension liabilities accrued separately from other GRS members, to enable the Authority to verify the appropriateness of allocations to the Authority.

(2) A Statement of Changes in Fiduciary Net Position by Division to enable the Authority to verify the appropriateness of allocations to the Authority that will: (A) commencing with the Fiscal Year ending June 30, 2015, continue to track and allocate to DWSD an undivided interest in the investments net of investment expenses in the GRS Plan; and, (B) commencing with the Fiscal Year ending June 30, 2016, continue to track and allocate to DWSD, and then within DWSD to DWSD-R and the Authority, an undivided interest in investments net of investment expenses in the GRS Plan. Administrative expenses for purposes of the determination of the Fiduciary Net Position of DWSD, DWSD-R and the Authority shall be allocated as provided in the Pension Agreement.

(3) An actuarial study that sets forth as of (A) the Fiscal Year ending June 30, 2015, the undivided interest in investments in the GRS Plan allocated to the DWSD Pension Pool as set forth in the Statement of Changes in Fiduciary Net Position by Division and the actuarial accrued liability and the UAAL for the DWSD Pension Pool, and (B) each Fiscal Year ending on and after June 30, 2016, the undivided interest in investments in the GRS Plan allocated to the DWSD Pension Pool and within the DWSD Pension Pool, the DWSD-R Pension Pool and the Authority Pension Pool, respectively, as set forth in the Statement of Changes in Fiduciary Net Position by Division and the actuarial accrued liability and the UAAL for the DWSD Pension Pool and within the DWSD Pension Pool, the DWSD-R Pension Pool and the Authority Pension Pool, respectively.

(4) An audit of the Statement of Changes in Fiduciary Net Position by Division expressing an opinion on each divisional column commencing with the Fiscal Year ending June 30, 2015. In lieu of a direct audit opinion on this schedule, the parties may agree to secure an in-relation-to audit opinion on this schedule (in-relation-to the audited financial statement of the GRS) on a regular or occasional basis at any time after the Fiscal Year ending June 30, 2017. To the extent that the actual net asset amounts as reflected in the final audit report differ from the net assets utilized to determine the UAAL for the DWSD Pension Pool reflected above, the difference shall be adjusted in a future GRS actuarial report and the UAAL provided on June 30, 2014 shall be considered amended accordingly.

In addition to the foregoing reports, the Pension Agreement also requires the GRS to provide the Authority for each Fiscal Year commencing from and after July 1, 2023, on its normal schedule for determining the current Fiscal Year's contributions to the GRS, with a determination of the UAAL for the Authority Pension Pool using the market value of assets for the Authority Pension Pool and whether the Authority Pension Pool is funded at 100%. If the Authority Pension Pool is fully funded at 100% or more, no contributions for the current Fiscal Year will be required of the Authority. If the Authority Pension Pool is less than 100% funded, then the Authority is required to make such level annual contributions to the GRS as necessary to amortize such shortfall over five years (as provided in the Leases or such greater period not to exceed ten years as agreed upon by GRS and the Authority) at an interest rate equal to the then current GRS investment return assumption. Except for the additional required

payments described in this paragraph, if any, the Authority shall have no further liability whatsoever to the City or the GRS in connection with any other shortfalls that that may occur with respect to the GRS Plan.

Financial Statements

The timing of the effective date of the Authority necessitates that historical analysis utilizes the prior DWSD audit for the year ended June 30, 2015. The basic financial statements of the Water Fund, an enterprise fund of the City as of and for the year ended June 30, 2015, included in APPENDIX II of this Official Statement, have been audited by KPMG LLP, independent auditors. KPMG LLP, as independent auditor of the financial statements of the Water Fund for the fiscal year ended June 30, 2015, has not reviewed, commented on or approved, and is not associated with, this Official Statement. The report of KPMG LLP relating to the financial statements of the Water Fund for the fiscal year ended June 30, 2015, which is a matter of public record, is included in this Official Statement. However, KPMG LLP has not performed any procedures on any financial statements or other financial information of the City or the Water Fund, including without limitation any of the information contained in this Official Statement, since the date of such report and has not been asked to consent to the inclusion of its report in this Official Statement.

Summary of Historical Revenues and Expenses

The following table shows historical revenue and expenses of the Water System for each of the five Fiscal Years ended June 30, 2011 through June 30, 2015. Although Fiscal Year 2016 has been completed, audited financial data are not yet available for Fiscal Year 2016. Estimated results for Fiscal Year 2016 are discussed below. See "Fiscal Year 2016 Estimate." Net Water Revenues are derived from audited financial statements of the DWSD Water Fund for Fiscal Years ended June 30, 2011 through June 30, 2015. Financial statements and notes thereto for the Fiscal Year ended June 30, 2015, together with the auditors' report thereon, are included in APPENDIX II.

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**Summary of Historical DWSD Water System Revenues and Expenses
For Fiscal Years 2011-2015**

		Fiscal Year Ending June 30,				
		<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
		\$	\$	\$	\$	\$
<u>Operating Revenues</u>						
1	Wholesale Service Revenue (a)	237,099,865	258,587,439	275,185,240	272,458,933	264,930,716
2	Retail Service Revenue (a)	74,810,362	71,540,060	75,653,762	72,420,199	93,221,432
3	Subtotal Service Revenue	311,910,227	330,127,499	350,839,002	344,879,132	358,152,148
4	Miscellaneous Revenue	4,091,974	6,002,446	4,688,757	4,490,228	6,125,903
5	Non-Operating Revenue (b)	4,063,773	7,792,561	5,563,781	7,921,702	1,826,278
6	Total Revenue	320,065,974	343,922,506	361,091,540	357,291,062	366,104,329
7	Operation and Maintenance Expenses (c)	146,880,420	165,080,448	151,204,340	145,268,245	136,029,813
8	Net Revenues	173,185,555	178,842,058	209,887,200	212,022,817	230,074,516
<u>Debt Service Requirements</u>						
9	Senior Lien Bonds	116,175,200	114,986,700	130,181,500	140,248,600	134,820,900
10	Senior and Second Lien Bonds	162,292,600	151,398,200	170,616,600	180,698,600	177,135,100
11	All Bonds, Including SRF Junior Lien	164,435,900	153,524,200	172,458,800	182,464,900	178,923,900
12	Net Revenues After Debt Service	8,749,655	25,317,858	37,428,400	29,557,917	51,150,616
13	Pension Obligation Certificates	5,203,400	5,499,700	5,796,300	2,826,869	NA
14	Transfers to Pension Obligation Payment Fund	NA	NA	NA	NA	9,780,400
15	Professional Service Fees - Detroit Bankruptcy	NA	NA	NA	NA	12,326,900
16	Net Available for Other Purposes	3,546,255	19,818,158	31,632,100	26,731,048	29,043,316
<u>Rate Covenant Debt Service Coverage (d)</u>						
17	Senior Lien Bonds	1.49	1.56	1.61	1.51	1.71
18	Senior and Second Lien Bonds	1.07	1.18	1.23	1.17	1.30
19	All Bonds, Including SRF Junior Lien	1.05	1.16	1.22	1.16	1.29

(a) Net of bad debt expense

(b) Excludes non-cash items such as changes in derivative values and capital contributions.

(c) Adjusted to only reflect elements that impact net revenues as defined by the Ordinance. See below.

		<u>Operation and Maintenance Expense</u>				
20	As Reported on Financial Statements	161,518,770	180,204,687	187,188,958	174,262,356	127,757,970
21	less: Net OPEB obligation	(12,634,493)	(12,724,239)	(17,248,909)	(1,313,688)	NA
22	less: Nonrecurring capital asset adjustments	(2,003,857)	(2,400,000)	(18,735,709)	(27,680,423)	(13,746,417)
23	plus: Prior period pension adjustment	NA	NA	NA	NA	11,718,260
24	Subtotal O&M for "normal" cash operations	146,880,420	165,080,448	151,204,340	145,268,245	125,729,813
25	Deposit to Pension Obligation O&M Fund	NA	NA	NA	NA	10,300,000
26	Total O&M for Net Revenues	146,880,420	165,080,448	151,204,340	145,268,245	136,029,813

(d) Computed consistent with Rate Covenant basis for rate determination purposes. Not applicable for purposes of Additional Bonds Test calculations.

Fiscal Year 2011-2015 Operations

The following information summarizes the financial operations of the Water System in Fiscal Years 2011 through 2015.

Revenues

As indicated in the above table, Water System revenues from service charges, net of bad debt expense, have increased approximately \$46 million, or 15%, since Fiscal Year 2011. This increase is primarily attributable to increases in charges during that period, as water sales declined by over 17% during the same period, as well as the varying levels of bad debt expense throughout the period. Wholesale service revenue during this period reflects a gradual transition away from a service charge structure that consisted entirely of commodity charges. The Fiscal Year 2011 charges were modified to

recover approximately 10 percent of the revenue requirement allocated to each customer through fixed charges. This portion was increased to approximately 27 percent in 2012 and to approximately 40 percent in Fiscal Year 2013, where it remained through Fiscal Year 2015. In addition to enhancing alignment of cost allocation and cost recovery techniques, this initiative was implemented to dampen seasonal and annual fluctuations in Water System revenues.

Also during this period, it became apparent that many of the originally established projected annual volumes in the wholesale customer contracts were overly optimistic. Subsequent negotiations with wholesale customers to reevaluate contract volumes resulted in lower expectations and revenue goals, but water sales still fell short of projected amounts in each of the past five years, particularly in Fiscal Years 2014 and 2015. These years were marked by extraordinarily lower peak water demands during mild summer months. While the conversion to a partially fixed charge recovery structure mitigated the impact on revenues, the lower than anticipated sales volumes still resulted in revenue shortfalls (compared to budget expectations) in each of the five years in the table above.

The Fiscal Year 2015 revenues also reflect the loss of Flint as a customer. The Fiscal Year 2015 budget, revenue plan, and service charge schedule were established and approved prior to Flint notifying DWSD that it was leaving the System immediately in late April 2014. Flint's departure resulted in an annual revenue reduction of approximately \$11 million, and it was not feasible to adjust service charges to other customers to address the shortfall in the Fiscal Year 2015 budget.

Bad debt expense is recognized in the DWSD financial statements based on an analysis of the size and age of accounts receivable and the expected ability to collect those receivables. Bad debt expense had the effect of decreasing revenues by approximately \$1 million in Fiscal Year 2015. The corresponding bad debt expense figures for Fiscal Years 2011, 2012, 2013 and 2014 were approximately \$9 million, \$13 million, \$16 million and \$14 million, respectively. Miscellaneous and non-operating revenues have been relatively stable during the same period.

Operation and Maintenance Expenses

The operation and maintenance expenses shown on Line 7 in the table are intended to represent actual annual transfers to the Operation and Maintenance Fund to fund the costs of operating the Water System. These figures are established by making certain adjustments to the operation and maintenance expense reported in the audited financial statements, as illustrated in footnote (c) on Lines 20 through 26 of the table. The adjustments include:

- Deducting expenses associated with accruing liabilities for Other Post-Employment Benefits ("OPEB"), which reflect future cash outlays;
- Deducting write-offs of amounts for capital assets that were originally capitalized in prior years, which reflect prior cash outlays;
- For 2015, adding estimated expenses related to the current pension obligations paid in Fiscal Year 2015 but accrued as a restated net position adjustment for the beginning Fiscal Year 2015 position;
- Also for Fiscal Year 2015, adding the operating portion of the pension obligation reimbursement payments. These amounts are obligations of the Operation and Maintenance Fund, but are not reflected as operation and maintenance expense in the audited financial statements.

The operation and maintenance expenses shown on Line 7 have declined significantly over the past four years, and were over \$20 million (over 17%) lower in Fiscal Year 2015 than in Fiscal Year

2012. This decline in operating expenses primarily reflects the impacts of the DWSD optimization program. Personnel expenses experienced by DWSD declined significantly during this period, consistent with the attrition-based decline in overall staffing levels.

A portion of the annual variation in operation and maintenance expenses is associated with the allocation of costs for functions that provide service to both the water and sewer systems. These costs are assigned to the Water System and Sewer System based on detailed labor distribution systems and overall management policy, and will naturally fluctuate based on where maintenance and related activities are focused.

Non-Operating Revenue

The category “Non-Operating Revenues (Expenses)” reflected in the financial statements is a “net” amount and has historically represented investment income, and relatively small amounts of non-operating income or certain non-cash write offs. This category also included certain amounts related to changes in the net valuation of swap agreements from year to year. These amounts are not included in the analysis of current revenues and expenses (particularly for purposes of calculating debt service coverage levels) as they generally do not have an effect on the amount of cash available for Water System operations or debt service. The presentation in the preceding table is intended to reflect cash elements only and does not reflect any non-cash Non-Operating Revenues (Expenses) elements.

Debt Service Coverage

Debt service coverage was below 1.1 for Second Lien Bonds in Fiscal Year 2011. The lower than planned debt service coverage levels for Fiscal Year 2011 were primarily attributable to higher than planned interest costs as a result of the credit market crisis of 2008, which required adjustments to the Water System’s debt portfolio that increased the interest expense, and which were not anticipated as part of the Fiscal Year 2011 budget and charge setting process. In addition, revenues were lower than planned levels in Fiscal Year 2011, as noted above.

Debt service coverage ratios have shown steady improvement in the subsequent years, primarily as a product of operation and maintenance expense savings. However, these levels did not achieve DWSD’s forecasted amounts. The lower than forecasted results were a key factor in the implementation of the structural reforms to the wholesale charge structure effective in Fiscal Year 2016. See “—Fiscal Year 2016 Estimate” and “—Projected Operations for Fiscal Year 2017 through 2021.”

Liquidity

Water System cash balances have increased in recent years due to improving financial performance. The following table details unrestricted cash and equivalents, annual operation and maintenance expense, and resulting days cash for Fiscal Year 2012 through Fiscal Year 2015.

Water System Days Cash

Fiscal Year	Cash & Equivalents ^{(a)(b)}	Operation & Maintenance Expenses ^(b)	Days Cash
2012	\$18.0	\$165.1	40
2013	47.7	151.2	115
2014	112.9	145.3	284
2015	140.0	136.0	377

(a) Based on audited financial statements and adjusted to reflect amounts due to the Sewer System from the Water System, and vice versa.

(b) \$ millions

Fiscal Year 2016 Estimate

Fiscal Year 2016 reflects a unique transition year. The Authority assumed operation of wholesale water and sewer services for the region on January 1, 2016, and DWSD was transitioned to a retail service provider on the same date. The Effective Date occurred halfway through Fiscal Year 2016, and complicates the process of establishing Fiscal Year 2016 financial performance results. Financial performance for the two new entities will be reported independently via separate accrual basis audited financial statements. However the financial activity of the Authority and DWSD are inextricably linked, as the Lease and the Bond Ordinance dictate that the Authority owns all Revenues collected from both entities. For purposes of measuring future financial performance (and key financial metrics) for the entire Water System, additional adjustments to each entity's accrual basis financial statements will be necessary. This process is further complicated for Fiscal Year 2016, given the mid-year transition. Water System financial performance for Fiscal Year 2016 will be reflected in at least three separate audited financial statements: (1) DWSD from July 1, 2015 through December 31, 2015; (2) the Authority from January 1, 2016 through June 30, 2016; and (3) DWSD from January 1, 2016 through June 30, 2016. Measuring and reporting financial performance as dictated by the Bond Ordinance will require careful consolidation of all of these independent reports.

The Authority has developed a forecast of estimated results for Fiscal Year 2016, which concluded on June 30, 2016 (the "Fiscal Year 2016 Estimate"). The forecast is based on a detailed review of actual reported preliminary subsidiary information reported by various management systems regarding revenues, expenditures, and cash receipts and disbursements during the entire Fiscal Year. It also reflects estimated activity that will be reflected as the process of closing the books on Fiscal Year 2016 performance proceeds in the coming months, derived from review of preliminary data.

The Fiscal Year 2016 Estimate follows the "modified cash" basis, consistent with the manner in which the historical revenues and expenses are presented. See "—Summary of Historical Revenues and Expenses" above. The Authority has analyzed actual cash receipts and disbursements in developing the Fiscal Year 2016 Estimate.

The Fiscal Year 2016 budget and service charge schedules were established and approved by the prior DWSD Board of Water Commissioners in March 2015. Subsequent modifications to the retail revenue requirement and service charge schedule for Retail Water Customers were made in June 2015. These modifications related to issues that emerged from the final Lease negotiations, including establishing a Budget Stabilization Fund revenue requirement and allocating a significant portion of the Lease Payment to debt service. The Authority has been measuring Fiscal Year 2016 financial performance against this modified financial plan, and the Fiscal Year 2016 Estimate is presented in the table below compared to the modified plan.

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DWSD/GLWA Water System - Fiscal Year 2016 Estimate

	<u>Annual Target</u>	<u>Actual</u>	<u>Variance</u>	<u>Achieve</u> <u>Pctg</u>	
	\$	\$	\$		
	(a)				
Revenue					
1	Water Wholesale Billings (b)	305,499,900	317,426,300	11,926,400	104%
2	less: Bad Debt Expense	(1,200,000)	(1,200,000)	0	100%
3	Wholesale Service Revenue	304,299,900	316,226,300	11,926,400	104%
4	Water Retail Billings	109,656,200	101,200,000	(8,456,200)	92%
5	less: Bad Debt Expense	(15,000,000)	(14,200,000)	800,000	95%
6	Retail Service Revenue	94,656,200	87,000,000	(7,656,200)	92%
7	Miscellaneous Operating Revenue	4,750,000	4,496,800	(253,200)	95%
8	Total Operating Revenue	403,706,100	407,723,100	4,017,000	101%
9	Non-Operating Revenue	2,805,300	2,805,300	0	100%
10	Total Revenue	406,511,400	410,528,400	4,017,000	101%
11	Operation and Maintenance Expense (c)	162,765,400	160,300,000	(2,465,400)	98%
12	Net Revenues	243,746,000	250,228,400	6,482,400	103%
Debt Service Requirements					
13	Senior Lien Bonds	139,102,500	134,027,000	(5,075,500)	96%
14	Senior and Second Lien Bonds	181,287,700	176,895,600	(4,392,100)	98%
15	All Bonds, Including SRF Junior Lien	183,065,600	178,673,500	(4,392,100)	98%
16	Net Revenues After Debt Service	60,680,400	71,554,900	10,874,500	118%
17	Fixed Non-Operating Expense (d)	34,792,200	35,393,000	600,800	102%
18	Net Available for Other Purposes	25,888,200	36,161,900	10,273,700	140%
Rate Covenant Debt Service Coverage (e)					
19	Senior Lien	1.75	1.87	0.11	107%
20	Senior and Second Lien	1.34	1.41	0.07	105%
21	All Bonds, Including SRF Junior Lien	1.33	1.40	0.07	105%

(a) Annual Target reflects Consolidated Budget Approved by DWSD BOWC, modified by Final Lease Negotiations

(b) Annual Target does not include any billings to Flint, but Actual does.

(c) Operation and Maintenance Expense Detail

1	"Regular" O&M expenses	152,465,400	150,000,000	(2,465,400)	98%
2	Deposit to Pension Obligation O&M Fund	10,300,000	10,300,000	0	100%
3	Subtotal O&M for Net Revenues	162,765,400	160,300,000	(2,465,400)	98%
4	Reverse O&M Pension Obligation Deposit	0	(10,300,000)	(10,300,000)	0%
5	Non-recurring capital asset adjustment	0	0	0	0%
6	TOTAL O&M per financial statements	162,765,400	150,000,000	(12,765,400)	92%

(d) Fixed Non-Operating Expense

7	Non-Op Pension Reimbursement	9,200,000	9,200,000	0	100%
8	B/C Note Payments	1,097,200	1,698,000	600,800	155%
9	Budget Stabilization Fund	2,327,000	2,327,000	0	100%
10	WRAP Deposit	1,995,000	1,995,000	0	100%
11	Lease Payment Deposit to Retail I&E	20,173,000	20,173,000	0	100%
12	TOTAL	34,792,200	35,393,000	600,800	102%

(e) Computed consistent with Rate Covenant basis for rate determination purposes. Not applicable for purposes of Additional Bonds Test calculations.

SOURCE: THE AUTHORITY / THE FOSTER GROUP, LLC.

The Fiscal Year 2016 budget, financial plan and service charge schedule included implementation of reforms to the wholesale service charge schedules. The Fiscal Year 2016 wholesale water service charges recover 60% of the revenue requirement allocated to each customer via fixed monthly charges (increased from approximately 40%), with the other 40% generated by commodity charges (down from approximately 60%). The Fiscal Year 2016 charges also reflect a more conservative approach to estimating water sales volumes for each customer. Instead of basing estimated water sales on the long-term planning amounts contained within the customer contracts, estimated water sales volumes for Fiscal Year 2016 represent the 24-month average ending September 2014. This time period covers two of the mildest summers on record. These modifications were made to further improve the alignment between cost of service allocation and cost recovery, and to stabilize billings to customers and revenues to the Authority.

The actual reported billings to wholesale customers indicate that the service charge structural reforms have produced initial success. For the first time this century, water sales volumes to wholesale customers exceeded budgeted levels during Fiscal Year 2016, producing a positive revenue variance of approximately \$2.4 million. In addition, the City of Flint temporarily reconnected to the Water System in October 2015 and provided unbudgeted revenues totaling approximately \$9.5 million. As a result, Fiscal Year 2016 wholesale service revenues are estimated to be almost \$12 million above projected levels. Revenues from Retail Water Customers are expected to be approximately \$7.6 million below projected levels. All of these revenue figures reflect very preliminary estimates of bad debt expense pending additional review of receivable balances.

The Fiscal Year 2016 actual operation and maintenance expense estimate is presented in a manner that reflects estimated cash obligations required of the Operation and Maintenance Fund(s) in existence during the year, including the “prior” DWSD fund from July 1, 2015 through December 31, 2015 and both the Authority and “new” DWSD Operation and Maintenance Fund(s) from January 1, 2016 through June 30, 2016. The estimated operation and maintenance expense shown on Line 11 of the table also includes the required transfer to the Pension Obligation Subaccounts of the Operation and Maintenance Funds. The “regular” operation and maintenance expense estimate is based on review of subsidiary financial reports and includes a contingency allowance for amounts that are yet to be reflected in subsidiary reports. The Authority estimates that a slight positive budget variance will result for Fiscal Year 2016.

The estimated positive variances in both revenues and operation and maintenance expenses for Fiscal Year 2016 produce an estimated positive net revenue variance, and higher than projected debt service coverage ratios. The fixed non-operating expenses shown in the table reflect requirements established by the Lease and the Bond Ordinance and include a deposit to the Pension Obligation Payment Fund (which includes the non-operating portion of the pension obligation requirement and amounts related to the B and C Note payments), deposits to the Budget Stabilization Fund and the WRAP Fund, and a deposit to the Local (City of Detroit Retail) System Improvement and Extension Account of the Improvement and Extension Fund. These amounts do not vary from budgeted levels, although the Fiscal Year 2016 estimate indicates a slight modification to the B and C Note payments. Revenues remaining after all of these required deposits are available for other purposes, as shown on Line 18, and are generally either transferred to the Improvement and Extension Fund or maintained as operating reserves. The Fiscal Year 2016 estimate indicates a positive variance of approximately \$10 million for these amounts, relative to budget.

Fiscal Year 2017 and 2018 Biennial Budget

The GLWA Board adopted the Great Lakes Water Authority Fiscal Year 2017 and 2018 Biennial Budget on May 25, 2016. The biennial budget establishes a formal authorization for Fiscal Year 2017, including an approved schedule of service charges to support the budget, and an initial estimate for Fiscal Year 2018. The budget includes several depictions of the overall financial plans, including a schedule

that reflects “Sources of Revenues and Use of Revenue Requirements – Flow of Funds Basis per Bond Ordinance.” That consolidated schedule includes elements related to the wholesale service requirements of the Authority, as well as the retail service requirements of DWSD, and recognizes that all receipts from both organizations flow through the Bond Ordinance flow of funds.

The approved Fiscal Year 2017 consolidated budget contains expenditures or revenue requirements totaling \$408.3 million, and includes water service charges designed to produce total revenues in the same amount. The wholesale elements of the budget reflect a revenue requirement increase of exactly four percent (4%) compared to the Fiscal Year 2016 budget. This approach to the budget development is consistent with the concepts set forth in the Lease.

The budget contains detailed exhibits regarding the financial plan for the Water System for Fiscal Year 2017 and the initial estimate for Fiscal Year 2018. The budget can be viewed in its entirety at <http://www.glwater.org/wp-content/uploads/2016/06/GLWA-FY-2017-and-2018-Budget-Binder-APPROVED-by-GLWA-Board-on-5.25.2016.pdf>.

Projected Financial Plan for Fiscal Year 2017 through 2021

The projected revenues of the Water System shown in the table titled “Summary of Projected Revenues and Additional Revenue Requirements For Fiscal Years 2017-2021” below are included and are described in the Feasibility Report prepared by The Foster Group, LLC. See APPENDIX I—FEASIBILITY CONSULTANT’S REPORT.

The projections set forth in the following table are intended as “forward-looking statements.” The Authority cautions that these projections may and often do differ materially from actual results. Some of the factors that could cause actual results to differ materially from those projected are the Authority’s ability to execute the CIP as scheduled and within budget, regional climate and weather conditions, and adverse legislative, regulatory or legal decisions (including environmental laws and regulations) affecting the Authority’s ability to manage the Water System.

As noted in the Feasibility Report, the projections summarized in the following table follow a “modified cash” approach of evaluating revenues and revenue requirements. In past years, at times significant variances between “modified cash” representations and actual cash flows for certain periods could occur, depending on seasonal patterns of billed revenues and cash receipts.

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**Summary of Projected Revenues and Revenue Requirements
For Fiscal Years 2017-2021**

	Fiscal Year Ending June 30,				
	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
	\$	\$	\$	\$	\$
Operating Revenue Under Existing Charges (a)	415,256,400	380,925,900	377,828,200	374,797,800	371,829,900
<u>Projected Revenue from Revenue Adjustments (b)</u>					
FY 2018: 9.0%		34,392,000	34,112,300	33,838,700	33,570,800
FY 2019: 4.9%			20,229,000	20,066,800	19,907,900
FY 2020: 4.9%				20,880,100	20,714,800
FY 2021: 4.9%					21,727,300
Total Projected Revenue from Water Charges	<u>415,256,400</u>	<u>415,317,900</u>	<u>432,169,500</u>	<u>449,583,400</u>	<u>467,750,700</u>
Miscellaneous Operating Revenue	4,750,000	4,750,000	4,750,000	4,750,000	4,750,000
Projected Non-Operating Revenue	<u>2,077,600</u>	<u>2,968,900</u>	<u>3,038,800</u>	<u>3,223,200</u>	<u>3,358,300</u>
Total Projected Revenue	422,084,000	423,036,800	439,958,300	457,556,600	475,859,000
Operation and Maintenance Expense (c)	155,775,700	160,668,100	164,900,700	169,183,500	173,588,500
Projected Net Revenues	266,308,300	262,368,700	275,057,600	288,373,100	302,270,500
Senior Lien Debt Service	134,234,700	127,687,500	126,355,900	143,676,900	151,900,200
Second Lien Debt Service	38,990,000	42,852,900	49,020,400	50,660,600	52,085,100
DWRF Junior Lien Debt Service	<u>2,036,400</u>	<u>2,410,700</u>	<u>2,953,300</u>	<u>3,244,100</u>	<u>3,242,600</u>
Total Debt Service (d)	175,261,100	172,951,100	178,329,600	197,581,600	207,227,900
Projected Senior Lien Debt Service Coverage	198%	205%	218%	201%	199%
Projected Second Lien Debt Service Coverage	154%	154%	157%	148%	148%
Projected Total Debt Service Coverage	152%	152%	154%	146%	146%
Balance for Other Purposes	91,047,200	89,417,600	96,728,000	90,791,500	95,042,600
<u>Projected Application of Balance</u>					
Transfer to Pension Obligation Payment Fund	10,912,700	10,912,700	10,912,800	10,912,800	10,912,800
Transfer to WRAP Fund	2,076,300	1,904,600	2,059,700	2,143,500	2,230,100
Transfer to Budget Stabilization Fund	360,400	360,500	0	0	0
Transfer to Extra. Repair and Repl. Fund	0	733,900	634,900	642,400	660,800
Lease Payment - Transfer to Detroit Local I&E	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000
Maintained as Operating Reserves	0	1,097,900	852,400	809,400	832,200
Available for Capital Improvements	55,197,800	51,908,000	59,768,200	53,783,400	57,906,700

(a) Reflects charges in effect during Fiscal Year 2017.

(b) Projected additional revenue is developed based upon revenue necessary to produce a four percent increase in annual revenue requirements, as indicated in the Lease.

(c) Includes operating portion of Pension Obligation.

(d) Includes debt service on the Series 2016 Bonds. Assumes bond sales in subsequent years at an annual interest rate of 4.75%. Although the Authority may issue Additional Water System Bonds as Senior Lien or Second Lien Bonds, for purposes of this table future debt is assumed to be issued as Senior Lien Bonds.

SOURCE: THE FOSTER GROUP, LLC.

Future Issuance of Additional Bonds

After the issuance of the Series 2016 Bonds, GLWA expects to issue Additional Bonds in the remaining years of the CIP period to finance additional expenditures identified in the CIP. See “THE CAPITAL IMPROVEMENT PROGRAM.” GLWA intends to adjust water service charges, as appropriate and consistent with the Bond Ordinance. To the extent such funding is not approved or secured or sufficient funds are not available in the Authority Regional Improvement and Extension Account of the Improvement and Extension Fund, additional debt issuance may be required during this projection period.

THE DETROIT WATER AND SEWERAGE DEPARTMENT

General

The Department is established under the City Charter and is governed by a seven-member board, known as the Board of Water Commissioners (“BOWC”), which meets monthly. Pursuant to the Leases and the Water and Sewer Services Agreement, the Department is responsible for (i) operating and maintaining its own local water and sewer system infrastructure within the City under the direction of the BOWC and (ii) acting as the billing and collection agent for the Authority.

Pursuant to the Leases, the Authority (i) has the exclusive right to establish rates for water and sewer service for customers of the Systems including Retail Customers, (ii) may delegate its rights to establish rates for services to customers of the Systems to one or more agents, as it deems necessary or convenient, and (iii) directly or through an agent, has the exclusive right to charge, bill to and collect from such customers amounts from services constituting the revenues of the Systems, including the retail rates and charges. Under the Water and Sewer Services Agreement, the Authority delegated to the City its rights to set and collect rates with respect to Retail Customers of the City. The Authority may terminate its appointment of the City as agent for the Authority if the City fails to perform its duties, obligations or administrative functions in accordance with the Water and Sewer Services Agreement.

Court Mandated Changes

As a result of several decades of intermittent noncompliance with the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 and the Water Quality Act of 1987 (collectively, the “Clean Water Act”) during the pendency of *United States v. City of Detroit*, the District Court mandated changes intended to rectify the root causes of noncompliance through a series of orders, including, but not limited to, the Stipulated Order dated February 11, 2011 (the “February 11, 2011 Stipulated Order”), the Order dated November 4, 2011 (the “November 4, 2011 Order”), the Order dated October 5, 2012 (the “October 5, 2012 Order”) the Order dated December 14, 2012 (the “December 14, 2012 Order,” and collectively with the February 11, 2011 Stipulated Order, the November 4, 2011 Order, the October 5, 2012 Order, the “Pre-GLWA Orders”), the Opinion & Order on Joint Motion for relief from Judgment Filed by the City of Detroit and the Detroit Water and Sewerage Department dated December 15, 2015 (the “December 15 Labor Order”) and the Order dated December 15, 2015 (the “December 15, 2015 Order” and, collectively with the Pre-GLWA Orders and the December 15 Labor Order, the “District Court Orders”).

The December 15, 2015 Order, issued in conjunction with the final approval of the Lease Documents by the Authority, the Mayor and the Department, and the satisfaction, effective January 1, 2016, of conditions precedent to the effectiveness of the Leases, provided that the Board of Water Commissioners appointed by the City shall be vested with the full powers enumerated in the Detroit City Charter (the “Charter”). In addition, the December 15, 2015 Order provides, in relevant part, that:

- The Department, as the billing and collecting agent of the Authority, manages the supply of water, drainage and sewerage services to Retail Customers of the City’s Local Water System and Local Sewer System, and the BOWC, in compliance with the Water and Sewer Services Agreement and the Leases, shall periodically establish retail rates for Retail Customers of the Local Water System and the Local Sewer System;
- The City is authorized to impose a lien against real property located within the City to address unpaid charges for water and sewerage services (including drainage), with interest;
- All moneys from fees collected for water or sewerage services shall be deposited with the Authority pursuant to the Water and Sewer Services Agreement;
- The BOWC is empowered to continue to exercise its existing authority under the Charter to assess drainage fees, charges or assessments to the users of the City’s local water and combined sewer and drainage infrastructure without further approval by the City Council;
- The provisions of the February 11, 2011 Order and the April 29, 2011 Order relating to the appointment and composition of the BOWC were nullified; and
- The Court’s previous rulings regarding the City’s compliance issues shall be followed in the operation of the Local Water System and the Local Sewer System except as otherwise modified by the Court.

Governance

The seven members of the BOWC are appointed by and serve at the pleasure of the Mayor of the City. In addition to the qualifications established in the December 15, 2015 Order, the Charter: (i) prohibits any member of the BOWC from being a City official or employee, or a principal or employee of a contractor of the City, (ii) requires that a member of the BOWC be a citizen of the United States and a resident of the State of Michigan, and (iii) requires no fewer than four members be residents of the City. The members of the BOWC serve four-year terms which are staggered so that not more than two members’ terms expire each year.

Local Water System and Local Sewer System

Detroit Water and Sewerage Department is a retail water and sewer utility, serving more than 225,000 Detroit residential and commercial customers. DWSD’s water network consists of more than 2,700 miles of distribution mains and nearly 3,000 miles of sewer collection piping.

Retail Water and Sewer Customers

The Department provides water services to Retail Water Customers and sewer services to Retail Sewer Customers. Retail service includes all water and sewer service customers, including residential, commercial, and industrial. The Department also provides water supply services and sewer services to certain customers outside the City on a very limited basis. Pursuant to the Water and Sewer Services Agreement and the December 15, 2015 Order, the BOWC approves Department retail rate schedules for these customers. These customers are billed on a monthly basis and water, sewerage and drainage charges are included on the same bill. The Department also bills various governmental agencies, including the City, for service. Rate changes, once established, generally become effective the following July 1, however, certain drainage charges are being phased in over several years, commencing October 1, 2016. For information regarding current billing and collection activities of the Department, see “THE DETROIT WATER AND SEWERAGE DEPARTMENT - Collections and Delinquencies.” The Department will act as the agent of the Authority for purposes of billing, collecting and enforcing payment of bills. The Department will also establish retail rates to produce revenues sufficient to pay the

Authority revenue requirement and the costs of operating, maintaining and improving the Local Water System and the Local Sewer System.

Local Water System Capital Improvement Plan

The Department utilizes a five-year Capital Improvement Plan (the “Local CIP” or the “Local Water System CIP”) to maintain and improve the reliability of the Local Water System, meet regulatory standards as well as to achieve greater operating and maintenance efficiency. In accordance with the terms of the February 11, 2011 Order and the By-Laws of the BOWC, the Local CIP must be approved by a supermajority of at least five members of the BOWC.

The Department previously maintained a master plan to plan and implement long-term improvements to the Water System serving Wholesale Customers and Retail Customers. Upon the assumption by the Authority of the operation of the Regional Water System, the Department no longer engages in the master plan process, but continues to develop and implement its five-year Local CIP for improvements to the Local Water System. The Department has issued a request for proposals for the development of a capital improvement asset management program, which will be designed to optimize the useful life of Local Water System assets. A critical part of the asset management program will be the performance of detailed asset condition assessments, which will further shape the long-term Local CIP.

Pursuant to the Water and Sewer Services Agreement, no later than February 1 of each year, the City shall develop and provide the Authority with a copy of the Local Water System CIP. The Local Water System CIP must include the capital improvements and an estimate of the costs which the City plans to undertake in the next Fiscal Year, and projected capital improvement projects and estimates for the five years following. At least three months prior to finalizing the Local Water System CIP and any modifications thereto, the City shall provide a copy of the proposed Local CIP to the Authority solely for the purpose of: (A) coordinating the Local Water System CIP and the Authority CIP to maximize economies of scale, minimize service disruptions and to achieve other efficiencies from a coordinated implementation effort, and (B) providing notice to the Authority of any financing requirements of the City for the Detroit Local Facilities to be satisfied from Lease Payments and/or the issuance of Authority Bonds or requests for collaboration on grant applications or other funding opportunities. Upon receipt of the adopted Local Water system CIP from the City, the Authority shall ensure that its financial planning and budgeting reflect the foregoing requirements.

The City agreed that, in conjunction with the implementation of the Local Water System CIP, it will, over time, install master water meters to measure consumption by the Detroit Local Water System and cross connection controls between the Detroit Local Water System and the Regional Water System.

The Local Water System CIP for Fiscal Year 2017-2021 was approved by the BOWC in February 2016. The following table reflects the current Local Water System CIP which reflects the transition for the operation and management of the Regional Water System by the Authority. The Fiscal Year 2017 through Fiscal Year 2021 projected expenditures reflect budgeted amounts.

The Local Water System CIP provides a framework for ensuring capital plans are consistent with overall organizational goals within a set of financial considerations including fiscal capacity, debt service obligations, impact on operating budgets and reserve levels. Actual project proposals are initiated and reviewed within the context of the Local Water System CIP. Deviations from the Local Water System CIP could occur as a result of factors such as actual bids versus cost estimates, unforeseen cost-benefit scenarios and grant opportunities.

The following table details the planned expenditures and the projected funding sources for the Fiscal Year 2017-2021 Local Water System CIP. Expenditures are focused on replacement, installation

and/or abandonment of existing water mains, replacement of inoperable fire hydrants, upgrading Department information technology systems, and replacing aging equipment and vehicles.

DWSD Local Water System Capital Improvement Plan Projected Funding Sources

	Fiscal Year Ending June 30,					Total
	2017	2018	2019	2020	2021	
	\$	\$	\$	\$	\$	\$
CIP Financing Requirements	49,220,000	43,520,000	56,093,000	40,063,000	38,240,000	227,136,000
Financing Sources						
<u>DWSD Local I&E Fund</u>						
Beginning Balance (a)	13,173,100					13,173,100
Lease Payment from GLWA	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000	112,500,000
Transfers from Revenues	2,978,600	4,008,500	4,168,800	4,335,600	4,509,000	20,000,500
Subtotal	38,651,700	26,508,500	26,668,800	26,835,600	27,009,000	145,673,600
<u>Construction Funds (GLWA Revenue Bonds)</u>						
Beginning Balance	0					0
DWRF Loan Proceeds	33,000,000	0	0	0	0	33,000,000
Proceeds from GLWA Revenue Bonds	57,000,000	0	0	0	0	57,000,000
Subtotal	90,000,000	0	0	0	0	90,000,000
Total Financing Sources	128,651,700	26,508,500	26,668,800	26,835,600	27,009,000	235,673,600
Balance	79,431,700	(17,011,500)	(29,424,200)	(13,227,400)	(11,231,000)	8,537,600
Cumulative Balance	79,431,700	62,420,200	32,996,000	19,768,600	8,537,600	

(a) Fiscal Year 2016 Lease Payment

SOURCE: DWSD

The current five-year Local Water System CIP is estimated to cost approximately \$227 million. Of this amount, the Department expects that approximately \$90 million (net amount) will be financed with proceeds of bonds issued by the Authority, including DWRF loans, and the balance will be financed with the Detroit Improvement and Extension Account of the Improvement and Extension Fund, including existing funds on hand and annual transfers of Lease Payments to the Account and annual revenues from Retail Water Customers, though additional bond financing remains a possibility.

Budget and Accounting Matters

The Department's budget policy is designed to be in alignment with the Department's rate setting cycle. The budget cycle begins with a BOWC meeting on or before November 1 each year to review programs, services, and activities to be included in the upcoming budget and to receive public comment. Before the December meeting of the BOWC, the Director submits a proposed budget for presentation at the regularly scheduled December meeting. Prior to adoption of the budget, the BOWC conducts a public hearing on the proposed budget which may be conducted at the same meeting in which the BOWC adopts the budget. Beginning with the adoption of the Fiscal Year 2016 budget in March 2015, the BOWC simultaneously approved the budget, Local CIP and revenue requirement to strengthen alignment among those key financial activities. The Department's budget policy provides that if the BOWC fails to adopt a budget prior to January 31st, the proposed budget shall be deemed the adopted budget for the Department. If necessary, an amendment to the adopted budget shall be adopted by the BOWC in a manner permitted by governing law as presented by the Director. If the BOWC fails to act upon a proposed budget amendment within 30 days following submission by the Director to the BOWC, then that amendment shall be deemed a part of the adopted budget. The budget of the Department has to be approved by the Financial Review Commission pursuant to the provisions of Act 181, Public Acts of Michigan, 2014.

Pursuant to the Water and Sewer Services Agreement, each year the City shall provide the Authority with: (i) the budget forecast for the Detroit Local Systems; (ii) the budgets for the operation and maintenance and other funding requirements of the Detroit Local Systems; (iii) the Local CIP; and (iv) the Direction to Apply Lease Payment. See APPENDIX VII – SUMMARY OF THE WATER AND SEWER SERVICES AGREEMENT.

Collections and Delinquencies

As of August 2, 2016, active retail customer accounts receivable for water and sewer service combined are approximately \$149 million, representing \$32 million from customers on active payment plans and \$117 million for regular active customers. Of that amount, \$112 million is 60 days past due, representing \$26 million for customers on active payment plans and \$67 million for regular active customers. Total 60 day and greater past due accounts are 28.9% of the approximately 250,000 total active retail customer accounts, or 13.6% after factoring out those customers on active payment plans.

The Department operates a computerized billing system which accounts for a total of approximately 305,000 retail customer accounts, of which approximately 225,000 are active accounts. Inactive accounts remain in the billing system while the Department pursues collection. Retail customer account categories include residential, commercial, and industrial. Based on the approved Fiscal Year 2017 retail rates, the typical monthly bill is approximately \$78 for combined water and sewer service charges based on 600 cubic feet of water consumed per month and a 5/8" meter. All Retail Customers are billed monthly and are allowed 21 days to pay, after which a one-time 5% late payment charge is applied.

In accordance with State law, the December 15, 2015 Order and the Water and Sewer Services Agreement, the City, as the agent of the Authority or the Authority if such agency is terminated, has a right to discontinue the supply of water to any premises for non-payment of water or sewer bills when due. It is the Department's policy that Retail Customers may have their service interrupted for non-payment if the account is more than thirty days in arrears. Residential customers are notified of payment plan options and financial assistance programs if they demonstrate that their account is delinquent due to financial hardship. Residential customers may be subject to constitutional safeguards regarding due process, including notice and hearing requirements in the event of discontinuation of services.

The Department's collection efforts in the past, including shut-off for non-payment, had not kept pace with an increasing level of delinquency since 2007, resulting in a significant number of accounts with past due balances. As of August 2, 2016, the average active residential account delinquency, which includes water and sewer charges, is \$669, based on approximately 61,800 of 165,000 accounts with past due balances of 60 days or more. As of the same date, active commercial accounts, the next largest retail customer category, present approximately 9,000 of 17,500 accounts with a past due balance of 60 days or more with an average past due amount of \$2,700, which includes water and sewer charges. The Department started a commercial customer personal contact program in 2015, which has improved collections. However, for accounts that continue in non-payment status, shut-offs will continue.

The shut-off program activity has historically been reduced from December through March of each year. The shut-off program has generated active engagement with customers whose service is preserved by participation in a payment plan program, as well as payment assistance programs for those who meet certain eligibility criteria. In 2014, the City announced a ten-point plan to encourage Retail Customers to enroll in payment plans and apply to expanded payment assistance programs from new non-profit organization partnerships. Additional funding commitments for the payment assistance programs have been provided by external sources, including the WRAP program, which began in Fiscal Year 2016. The City also expanded customer service hours. The Department has been able to improve collection efforts with increased contacts with delinquent customers before shut-offs occur and earlier intervention with customers on payment plans when they become delinquent. Since May 18, 2015, the number of

customers scheduled for shut-off of service declined from 26,000 to 6,000, and the number of payment plans increased from 24,000 to 42,000.

DWSD's low-income customers also may seek assistance from the Authority's WRAP Fund, established by GLWA under the Bond Ordinance to assist eligible residential customers across the entire Authority service area. See "SERVICE AREA AND CUSTOMERS - Water Residential Assistance Program." An additional barrier to active customer engagement has been the absence of customer names associated with residential retail accounts. Presently, most residential retail customer accounts are addressed to "Resident," limiting the availability of other traditional collection efforts. The Department has recently initiated a program to transfer the focus from a parcel-based billing system to an individual-based billing system to leverage current technology and improve collection efforts.

In the event that an account remains delinquent for more than six months, the Municipal Water Lien Act, MCL 123.161 et seq., provides that the charges for water and sewage service furnished to premises may become a lien on such premises when the service is provided, and the lien may be placed on the property tax roll. The lien may then be enforced in the same manner as the collection of property taxes and enforcement of a lien for property taxes (assuming proper statutory notice to the party responsible for the payment of the charges). The Department historically has transmitted delinquent accounts to the City Treasurer who places the delinquent amount on the winter tax bill. If the delinquent amounts are not collected by the City Treasurer by March 1 each year, the City transfers unpaid real property tax bills to Wayne County for collection in accordance with State law. The City receives payment for such taxes from Wayne County's delinquent tax revolving fund as of March 1 each year, which is funded by the issuance of Delinquent Taxes Anticipation Notes. If the delinquent real property taxes remain uncollected after three years, the County charges the respective amount of such taxes back to the City. The Department used alternate methods of collection in Fiscal Years 2015 and 2016, and did not submit delinquent receivables to the Wayne County Treasurer as it is currently pursuing other methods of collection as described above.

Prior to the Effective Date, the City, acting through the BOWC, and the Authority each adopted ordinances that authorize the Authority to take all such actions necessary to charge and collect rates and charges for water and sewer services as described in the Leases. Such rates and charges may be a lien on the premises for which the services have been provided. Amounts delinquent for six (6) months or more may be certified annually to the City's Board of Assessors to be entered upon the next tax roll against the premises to which the services have been rendered. Such lien may be enforced by the City on behalf of Authority or Authority directly in the manner prescribed in the City Charter or by other applicable law for the enforcement of tax liens.

Fiscal Year 2017 Budget

The BOWC adopted the Fiscal Year 2017 budget for the Local Water System on March 16, 2016. The approved Fiscal Year 2017 budget contains funding for the City retail customer class allocated share of the Regional Water System Revenue Requirements established by the Authority, and the entirety of the Local Water System Revenue Requirements. The Local Water System Revenue Requirements include the annual operation and maintenance costs, funding for which is transferred monthly from GLWA to DWSD, and certain costs related to the Local Water System that that GLWA directly pays on behalf of DWSD, including debt service, pension obligation payments, and other non-operating expenses allocable to the Local Water System. The Fiscal Year 2017 retail water rates and charges for Detroit customers were designed to achieve a maximum rate increase of 3.2% in Fiscal Year 2017 compared to the rates and charges in effect during Fiscal Year 2016. The Fiscal Year 2017 budget assumes a collection rate of 90%.

Legacy Obligations of the Department

Pension Obligations

The GRS covers all eligible City employees, other than police and firefighters, including the employees of the Department. The GRS consists of two components: (i) the benefits accrued under GRS in effect as of June 30, 2014 (“Prior GRS”), which benefits are substantially modified in the Plan of Adjustment, and (ii) the benefits accrued on and after July 1, 2014 (“New GRS”). New GRS provides retirement and survivor benefits to City employees or former employees and their beneficiaries. Active members of New GRS earn benefits under a formula based on final average base compensation, service credit for employment on and after July 1, 2014 and a benefit multiplier of 1.5%. Members are vested upon completion of 10 years of service (service with the City prior to July 1, 2014 is taken into account for this purpose). Vested members may retire with full benefits upon attainment of age 62 (with a limited transition period for employees who were age 53 or older as of June 30, 2014). Employees may retire at age 55 with 30 years of service and collect an actuarially reduced retirement benefit. No disability benefits are provided to employees under New GRS. Survivor benefits are payable to a member’s spouse or other beneficiary. For each Fiscal Year beginning July 1, 2018 and later, the New GRS pension benefits of retirees who are at least 62 years old and have been receiving benefits for at least 12 months may be increased by a 2% COLA on the original pension amount, provided that the funding level of New GRS projected over a five year period is 100% or greater.

On the Plan Effective Date, the City assumed the obligations related to the already accrued benefits under Prior GRS and is responsible for funding all amounts necessary to provide the adjusted (reduced) pension benefits to its employees and retirees who accrued benefits in the Prior GRS, although the City's contributions will be fixed during the period ending June 30, 2023. After June 30, 2023, the City and DWSD will be required to contribute all amounts necessary to fund the modified accrued pensions of members regardless of the actual investment performance of the assets of GRS. Pursuant to the Leases, the Authority is responsible for a portion of the Department’s allocable share of contributions. The City will make the contributions from its available cash and, during the ten-year period from July 1, 2023 through June 30, 2033, from approximately \$188 million in funding received from outside sources in settlement of certain issues affecting the City and its retirees (the “Outside Funding”). Certain of the sources of the Outside Funding have pre-paid \$70,674,571 of the \$188 million. The City estimated that it would be required to contribute approximately \$442 million from its available cash during this 10-year period, commencing with a \$110 million payment in fiscal year 2024. See “AUTHORITY FINANCIAL OPERATIONS—Legacy Retirement System Obligations of the Authority” for a description of the Authority’s contribution obligations.

Certificates of Participation

The Plan of Adjustment provided for the satisfaction in full of claims relating to certain Certificates of Participation (“COPs”) issued by certain trusts created by the Detroit General Retirement System Service Corporation to fund certain unfunded accrued actuarial liabilities of the Prior GRS, in part in consideration for the receipt of the B Notes which were issued in the aggregate principal amount of \$631,964,145 and are payable over 30 years, and the C Notes, which were issued in the aggregate principal amount of \$88,430,021 and are payable over 12 years, each issued on December 10, 2014. The Department is responsible for its allocable share of the B Notes and C Notes, based on the proportion of Department employees to City employees under Prior GRS, consistent with prior years’ formulas for allocation of COP liabilities. Pursuant to the Leases, the Authority is responsible for a portion of the Department’s allocable share. These amounts will be payable after and subordinate to the payment of debt service on all bonded indebtedness of the Water System and replenishment of the debt service reserve funds relating to that indebtedness. See “AUTHORITY FINANCIAL OPERATIONS—Legacy Retirement System Obligations of the Authority” for a description of the Authority’s contribution obligations.

Other Post-Employment Benefits

The Plan of Adjustment restructured the City's retiree health legacy obligations by eliminating billions in unfunded retiree health obligations through the creation of two voluntary employee beneficiary associations ("VEBAs"), which will be exclusively responsible for retiree health programs and payments for City employees who retired prior to January 1, 2015, after which, the City has had no further responsibility to provide retiree healthcare or any other retiree benefits to VEBA Beneficiaries. A total allocation of \$492.7 million of B Notes, plus an additional contribution from private foundations of approximately \$5.0 million (paid over time), will be used to fund the VEBAs.

The Department will be responsible for its allocable share of the portion of the B Notes relating to settlement of OPEB claims, consistent with prior years' formulas for allocation of OPEB contributions on a pay-as-you-go basis. Pursuant to the Leases, the Authority is responsible for a portion of the Department's allocable share. Projections indicate that the Department's total OPEB settlement payments, in the form of B Notes, will be equal to \$105 million. This represents a pro-rata share of the citywide settlement. If the City does not make the payments under the B Notes, the Detroit General VEBA board of trustees will have the right to sue the City for payment. See "AUTHORITY FINANCIAL OPERATIONS—Legacy Retirement System Obligations of the Authority" for a description of the Authority's contribution obligations.

Employees of the City and the Department who retire on or after January 1, 2015 may be eligible for Retiree Welfare Benefits, which benefits will be an obligation of the Department. The Department has reached consensual collective bargaining agreements or imposed employment terms pursuant to the provisions of Act 436, Public Acts of Michigan, 2012, as amended, with all Department bargaining units, and does not project any material adverse effect on Department financial operations.

FEASIBILITY CONSULTANT'S REPORT

Reliance on the Feasibility Report and Historical Financial Information

In preparing the Feasibility Report, the Feasibility Consultant has relied upon certain assumptions and projections regarding future operating expenses, capital expenditures and debt service on the Series 2016 Bonds, some of which are those of the Authority or DWSD. See APPENDIX I – FEASIBILITY CONSULTANT'S REPORT. The Feasibility Consultant has also made other assumptions, including assumptions regarding population decline, water use patterns, rate increases, collection rates and the response customers of the Water System will have to rate increases. Projected operating and financial performance of the Water System may not be indicative of future performance; actual results will differ from those included in the Feasibility Report, and such differences may be material. GLWA cannot give any assurance that the events assumed will materialize or that actual results will match those projected, and any such differences may be material. In addition, the future policies, operations and financing decisions of GLWA may not be the same as those assumed in the Feasibility Report. No representation is made or intended, nor should any representation be inferred, with respect to the likely existence of any particular future set of facts or circumstances, and prospective purchasers of the Series 2016 Bonds are cautioned not to place undue reliance upon the Feasibility Report or the revenue forecasts or other projections contained therein.

In addition, certain historical financial information is included in this Official Statement. There can be no assurance that the financial results achieved in the future will be similar to historical results, and the financial information is expressly qualified in its entirety by the disclaimers set forth in such financial information and the disclosure in this Official Statement. Such future results will vary from historical results, and actual variations may be material. Therefore, the historical operating results of the Water System contained in this Official Statement cannot be viewed as a representation that sufficient

revenues will be generated in the future to make timely payment of principal of, redemption premium, if any, and interest on the Series 2016 Bonds.

LITIGATION

GLWA Litigation

GLWA has not been served with any litigation and, to the best of GLWA's knowledge, there is no threatened litigation against GLWA seeking to restrain or enjoin the sale of the Series 2016 Bonds, affecting the security pledged therefor or questioning or affecting the validity of the proceedings or authority under which the Series 2016 Bonds were issued. Neither the creation, organization or existence of GLWA, nor the title of any of the present members or other officers of GLWA to their respective offices, is being contested. GLWA has not been served with any litigation and, to the best of GLWA's knowledge, there is no litigation threatened which in any manner questions the right of the GLWA Board to adopt the Bond Ordinance or the 2016 Series Ordinance or to assume the DWSD Water Bonds.

Except as noted in this section, GLWA has not been served with any litigation which may have a material impact on GLWA's operations or Revenues and, to the best of GLWA's knowledge, there is no threatened litigation against GLWA which may have a material impact on GLWA's operations or Revenues.

Detroit Water & Sewerage Department v. Highland Park, WCCC Case No. 14-001974 CK; COA Docket No. 327448; SC Docket No. 154017. DWSD filed this action against the City of Highland Park for failure to pay for water and sewer services. Judgment was issued July 31, 2014 and the City has levied this judgment on the tax roll for collection. On April 30, 2015, the City of Highland Park appealed the judgment and the trial court entered an order staying enforcement of the judgment until Highland Park's appeal is resolved. Responsibility for this litigation was assigned to the GLWA pursuant to the Lease Agreement and the Sewer Lease. Highland Park's appeal is currently pending in the Michigan Court of Appeals; however Highland Park filed an *Interlocutory Application for Leave to Appeal* in the Michigan Supreme Court requesting that the Supreme Court reverse a decision by the Court of Appeals not to grant Highland Park's request to stay the appeal and return the case to the trial court for further proceedings. GLWA opposed this *Interlocutory Application*. On September 27, 2016, the Michigan Supreme Court entered an Order denying Highland Park's *Interlocutory Application*. In its Order the Supreme Court stated, "[W]e are not persuaded that the questions presented should be reviewed by this Court."

GLWA is committed to continuing to seek enforcement of its judgment and collection of the debt. While the litigation remains pending, GLWA's Board as well as the governing bodies of several of its customers have petitioned Michigan's Governor to intervene and address Highland Park's continuing non-payment issues. In response to this request, GLWA has engaged in discussions with the MDEQ to determine if there is a basis to address the concerns raised by the GLWA Board. On September 26, 2016, Highland Park asked GLWA if it was willing to re-open settlement discussions. GLWA responded that it was willing to have further discussions with the State's participation. The MDEQ has indicated a willingness to participate and the parties are looking for available dates to resume their discussions.

DWSD Litigation

The information under this "LITIGATION - DWSD Litigation" section has been furnished solely by DWSD. No representation is made by the Authority or the Underwriters as to the completeness or accuracy of such information.

Except as noted in this section, the Department has not been served with any litigation which is expected to have a material impact on the Department's operations or revenues and, to the best of the

Department's knowledge, there is no threatened litigation against the Department which is expected to have a material impact on the Department's operations or revenues.

In Re: City of Detroit; Lyda, et al. v. City of Detroit. On July 20, 2014, a group of Detroit residents, along with several non-profit organizations, filed a complaint in the Bankruptcy Court seeking declaratory and injunctive relief with respect to the billing and collection policies of the Department. The plaintiffs sought injunctive relief and damages contending that the Department's policies relating to notice of bills, the manner in which payments may be made and remedies for collection of accounts, including termination of services, violate various provisions of the United States and State Constitutions and provisions of the Bankruptcy Code. On September 29, 2014, Judge Rhodes dismissed the plaintiffs' complaint. On January 5, 2015, the plaintiffs filed an appeal of that decision; USDC, Case No. 2:15-cv-10038-BAF-RSW. On September 16, 2015, the District Court entered an Opinion Affirming Bankruptcy Court Rulings and dismissing the appeal. On October 8, 2015, the Lyda plaintiffs filed their Notice of Appeal from the District Court to the Court of Appeals. On August 2, 2016, the Sixth Circuit Court of Appeals held oral argument on the appeal. No decision has been entered. The City continues to believe its policies are both legal and appropriate and that the Bankruptcy Court's decision should be upheld.

United House of Prayer v. City of Detroit, WCCC Case No. 15-009083-CZ. Plaintiffs in *United House of Prayer* filed a class action complaint on July 10, 2015, alleging that the manner in which the Department establishes its rates for fire line service is unconstitutional. The City filed a Motion for Summary Disposition as its initial response to the complaint. Prior to the hearing on this motion, the parties agreed to participate in facilitative mediation and reached a tentative settlement. The terms of the settlement agreement are being finalized and the settlement was presented to the Court for approval on September 9, 2016, which was preliminarily approved on September 16, 2016. As part of the settlement, the City will pay a total of \$5,000,000 to the proposed class (inclusive of attorneys' fees and costs), and will perform a new rate study in connection with its fire line service.

Michigan Warehousing Group, LLC v. City of Detroit, WCCC Case No.15-010165 CB is a class action case filed on August 3, 2015, alleging that the City's drainage charges violate the Michigan Constitution, and additionally alleges a number of unjust enrichment claims. This class action matter was removed to the United States District Court and the City has filed its Answer to Complaint together with a Motion to Dismiss. The Plaintiffs withdrew their federal claim, thereby divesting the federal court of jurisdiction. The federal court remanded the case to Wayne County Circuit Court, where it is now pending. The City answered the Plaintiffs' equal protection claim, but filed a Motion for Summary Disposition with respect to all other claims alleged by the Plaintiffs. Two mediation sessions were held but a settlement was not able to be reached. On September 9, 2016, Wayne County Circuit Court Judge John Murphy heard and denied the City's Motion to Dismiss six of seven of the Plaintiffs' claims. The City is considering appealing the denial and has until October 4, 2016 to do so. Because the City's motion was based in part on governmental immunity, the City has an automatic leave to appeal as well as an automatic right to a stay of the case. The City believes its policies are both legal and appropriate and plans to vigorously defend this lawsuit, however, it will assess whether or not additional facilitation would be meaningful.

Abernathy, et al v. City of Detroit, WCCC No. 16-010128-NZ; *Bakowski, et al. v. City of Detroit*, WCCC No. 16-010116-NZ; *Agnew, et al. v. City of Detroit*, WCCC 16-010085. These three class action suits were filed in August 2016 alleging damages from sewer back-ups which occurred following a large rain event on May 25, 2011. Act 222, Public Acts of Michigan, 2001, as amended, provides an exception to governmental immunity for sewage disposal system events. In all, there appear to be approximately 101 plaintiffs. Most of the plaintiffs filed claims in the United States Bankruptcy Court in connection with the City of Detroit's Chapter 9 Bankruptcy, and the stay has since been lifted, allowing the lawsuits to be filed in state court. The plaintiffs' potential damages are limited by the City of Detroit's Plan of Adjustment. Claims less than \$25,000 are paid at 25% of their value in cash (so, for

example, a claim for \$25,000 would be paid at \$6,250 in full satisfaction). Claims greater than \$25,000 will receive a share of a fixed amount of B Notes which will be paid over time. Because the amount of B Notes is fixed, claims in excess of \$25,000 will decrease the amounts other unsecured claimants receive, but will have no financial effect on the City or DWSD.

TAX MATTERS

General

In the opinion of Dickinson Wright PLLC, Bond Counsel to the Authority, based on its examination of the documents described in its opinion, under existing law, the interest on the Series 2016 Bonds (a) is excluded from gross income for federal income tax purposes and (b) is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations. It should be noted, however, that with respect to corporations (as defined for federal income tax purposes) such interest is taken into account in determining adjusted current earnings for the purpose of computing the alternative minimum tax imposed on such corporations. The opinion in (a) above is subject to the condition that the Authority comply with all requirements of the Code, that must be satisfied subsequent to the issuance of the Series 2016 Bonds in order that interest thereon be (or continue to be) excluded from gross income for federal income tax purposes. These requirements include rebating certain earnings to the United States. Failure to comply with such requirements could cause the interest on the Series 2016 Bonds to be included in gross income retroactive to the date of issuance of the Series 2016 Bonds. The Authority has covenanted to comply with all such requirements to the extent permitted by law.

Bond Counsel to the Authority will express no opinion regarding other federal tax consequences arising with respect to the Series 2016 Bonds and the interest thereon.

Prospective purchasers of the Series 2016 Bonds should be aware that (i) interest on the Series 2016 Bonds is included in the effectively connected earnings and profits of certain foreign corporations for purposes of calculating the branch profits tax imposed by Section 884 of the Code, (ii) interest on the Series 2016 Bonds may be subject to a tax on excess net passive income of certain S corporations imposed by Section 1375 of the Code, (iii) interest on the Series 2016 Bonds is included in the calculation of modified adjusted gross income for purposes of determining taxability of social security or railroad retirement benefits, (iv) the receipt of interest on the Series 2016 Bonds by life insurance companies may affect the federal tax liability of such companies, (v) in the case of property and casualty insurance companies, the amount of certain loss deductions otherwise allowed is reduced by a specific percentage of, among other things, interest on the Series 2016 Bonds, (vi) registered owners acquiring the Series 2016 Bonds subsequent to initial issuance will generally be required to treat market discount recognized under Section 1276 of the Code as ordinary taxable income, (vii) the receipt or accrual of interest on the Series 2016 Bonds may cause disallowance of the earned income credit under Section 32 of the Code, (viii) interest on the Series 2016 Bonds is subject to backup withholding under Section 3406 of the Code in the case of registered owners that have not reported a taxpayer identification number and are not otherwise exempt from backup withholding, and (ix) registered owners of the Series 2016 Bonds may not deduct interest on indebtedness incurred or continued to purchase or carry the Series 2016 Bonds, and financial institutions may not deduct that portion of their interest expense allocated to interest on the Series 2016 Bonds.

In the opinion of Dickinson Wright PLLC, Bond Counsel to the Authority, based on its examination of the documents described in its opinion, under existing law, the Series 2016 Bonds and the interest thereon are exempt from taxation by the State of Michigan or by any taxing authority within the State of Michigan, except estate taxes and taxes on gains realized from the sale, payment or other disposition of the Series 2016 Bonds.

Amortizable Bond Premium

For federal income tax purposes, the difference between an original registered owner's cost basis of the Series 2016 Bonds initially sold at a premium as shown on the inside cover page hereof (the "Original Premium Bonds") and the amounts payable on the Original Premium Bonds other than stated interest constitutes an amortizable bond premium. The same applies with respect to any Series 2016 Bond, if a registered owner's cost basis exceeds the amounts payable thereon other than stated interest (collectively with the Original Premium Bonds held by the original registered owners, "Premium Bonds"). Such amortizable bond premium is not deductible from gross income, but is treated for federal income tax purposes as an offset of the amount of stated interest paid on the Premium Bonds, which may affect liability for the branch profits tax imposed by Section 884 of the Code. The amount of amortizable bond premium allocable to each taxable year is generally determined on the basis of the registered owner's yield to maturity determined by using the registered owner's basis (for purposes of determining loss on sale or exchange) of such Premium Bonds and compounding at the close of each six-month accrual period. The amount of amortizable bond premium allocable to each taxable year is deducted from the registered owner's adjusted basis of such Premium Bonds to determine taxable gain upon disposition (including sale, redemption or payment at maturity) of such Premium Bonds.

Future Developments

NO ASSURANCE CAN BE GIVEN THAT ANY FUTURE LEGISLATION OR CLARIFICATIONS OR AMENDMENTS TO THE CODE, IF ENACTED INTO LAW, WILL NOT CONTAIN PROPOSALS WHICH COULD CAUSE THE INTEREST ON THE SERIES 2016 BONDS TO BE SUBJECT DIRECTLY OR INDIRECTLY TO FEDERAL OR STATE OF MICHIGAN INCOME TAXATION, ADVERSELY AFFECT THE MARKET PRICE OR MARKETABILITY OF THE SERIES 2016 BONDS, OR OTHERWISE PREVENT THE REGISTERED OWNERS FROM REALIZING THE FULL CURRENT BENEFIT OF THE STATUS OF THE INTEREST THEREON. FURTHER, NO ASSURANCE CAN BE GIVEN THAT ANY SUCH FUTURE LEGISLATION, OR ANY ACTIONS OF THE INTERNAL REVENUE SERVICE, INCLUDING BUT NOT LIMITED TO, SELECTION OF THE SERIES 2016 BONDS FOR AUDIT EXAMINATION, OR THE AUDIT PROCESS OR RESULT OF ANY EXAMINATION OF THE SERIES 2016 BONDS OR OTHER BONDS THAT PRESENT SIMILAR TAX ISSUES, WILL NOT ADVERSELY AFFECT THE MARKET PRICE OF THE SERIES 2016 BONDS. BOND COUNSEL TO THE AUTHORITY EXPRESSES NO OPINION REGARDING ANY PENDING OR PROPOSED FEDERAL OR STATE OF MICHIGAN TAX LEGISLATION.

INVESTORS SHOULD CONSULT WITH THEIR TAX ADVISORS AS TO THE TAX CONSEQUENCES OF THEIR ACQUISITION, HOLDING OR DISPOSITION OF THE SERIES 2016 BONDS AND THE TAX CONSEQUENCES OF THE ORIGINAL ISSUE PREMIUM THEREOF, IF ANY.

The tax status of the Series 2016 Bonds could be affected by post-issuance events. Various requirements of the Internal Revenue Code of 1986, as amended, must be observed or satisfied after the issuance of the Series 2016 Bonds in order for such interest to remain excludable from gross income of the holders thereof. These requirements include restrictions on the use of the proceeds of the Series 2016 Bonds, use of the facilities financed by the Series 2016 Bonds, investment of proceeds of the Series 2016 Bonds, and the rebate of so-called excess arbitrage earnings. Compliance with these requirements is the responsibility of GLWA. Failure to comply could result in the inclusion of interest on the Series 2016 Bonds in gross income retroactive to the date of issuance of the Series 2016 Bonds.

The IRS conducts an audit program to examine compliance with the requirements applicable to tax-exempt obligations. If the Series 2016 Bonds become the subject of an audit, under current IRS procedures, the Authority would be treated as a taxpayer in the initial stages of an audit, and the owners

of the Series 2016 Bonds would have limited rights to participate in the audit process. The initiation of an audit with respect to the Series 2016 Bonds could adversely affect the market value and liquidity of the Series 2016 Bonds, even though no final determination about the tax-exempt status would have been made. If an audit were to result in a final determination that the Series 2016 Bonds do not qualify as tax-exempt obligations, such a determination could be retroactive in effect to the date of issuance of the Series 2016 Bonds.

In addition to post-issuance compliance, a change in law after the date of issuance of the Series 2016 Bonds could affect the tax-exempt status of the Series 2016 Bonds or the economic benefit of investing in the Series 2016 Bonds. For example, Congress could eliminate the exemption for interest on the Series 2016 Bonds, or it could reduce or eliminate the federal income tax, or it could adopt a so-called “flat tax.”

CERTAIN LEGAL MATTERS

The legality of the authorization, sale and delivery of the Series 2016 Bonds is subject to the approval of Bond Counsel to the Authority, whose approving opinion, substantially in the form attached as Appendix X to this Official Statement, will be delivered upon the issuance of the Series 2016 Bonds. The fees to be received by the Bond Counsel to the Authority in connection with the issuance of the Series 2016 Bonds will be paid from the proceeds of the Series 2016 Bonds.

Certain legal matters will be passed upon for the Underwriters by their counsel, Kutak Rock LLP, Washington, D.C. Certain legal matters will be passed upon for DWSD by its counsel, Miller, Canfield, Paddock and Stone, P.L.C.

RATINGS

Moody’s, S&P and Fitch have assigned the Series 2016A Bonds and the Series 2016C Bonds ratings of “A3” (stable outlook), “A-” (positive outlook), and “A” (stable outlook) respectively, and the Series 2016B Bonds and the Series 2016D Bonds ratings of “Baa1” (stable outlook), “BBB+” (positive outlook), and “A-” (stable outlook), respectively. Moody’s and S&P are expected to assign ratings of “A2” (stable outlook) and “AA” (stable outlook) to the Insured Bonds based upon delivery of the AGM Policy by AGM. Such ratings reflect only the views of Moody’s, S&P and Fitch and an explanation of the significance of such ratings may be obtained from Moody’s, S&P and Fitch. The Authority has furnished to Moody’s, S&P and Fitch certain information and materials with respect to the Series 2016 Bonds. There is no assurance that the ratings which have been assigned to the Series 2016 Bonds will continue for any given period of time or that either of them will not be revised or withdrawn entirely by Moody’s, S&P or Fitch, if in the judgment of Moody’s, S&P or Fitch circumstances so warrant. A downward revision or withdrawal of a rating may have an adverse effect on the market price of the Series 2016 Bonds. A securities rating is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at any time.

UNDERWRITING

The Underwriters have agreed, subject to the terms of a bond purchase agreement (the “Bond Purchase Agreement”) with the Authority dated October 14, 2016, to purchase the Series 2016 Bonds from the Authority. The Bond Purchase Agreement provides, in part, that the Underwriters, subject to certain conditions, will purchase from the Authority all the Series 2016 Bonds for a purchase price of \$1,054,143,293.57, which purchase price is equal to the par amount of the Series 2016 Bonds, plus net original issue premium of \$139,113,281.25, and less Underwriters’ discount of \$2,774,987.68. The initial public offering prices of the Series 2016 Bonds may be changed from time to time by the Underwriters.

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

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

Citigroup Global Markets Inc., an Underwriter of the Series 2016 Bonds, has entered into a retail distribution agreement with each of TMC Bonds L.L.C. (“TMC”) and UBS Financial Services Inc. (“UBSFS”). Under these distribution agreements, Citigroup Global Markets Inc. may distribute municipal securities to retail investors through the financial advisor network of UBSFS and the electronic primary offering platform of TMC. As part of this arrangement, Citigroup Global Markets Inc. may compensate TMC (and TMC may compensate its electronic platform member firms) and UBSFS for their selling efforts with respect to the Series 2016 Bonds.

J.P. Morgan Securities LLC (“JPMS”), one of the Underwriters of the Series 2016 Bonds, has entered into negotiated dealer agreements (each, a “Dealer Agreement”) with each of Charles Schwab & Co., Inc. (“CS&Co.”) and LPL Financial LLC (“LPL”) for the retail distribution of certain securities offerings at the original issue prices. Pursuant to each Dealer Agreement, each of CS&Co. and LPL may purchase Series 2016 Bonds from JPMS at the original issue price less a negotiated portion of the selling concession applicable to any Series 2016 Bonds that such firm sells.

Morgan Stanley & Co. LLC, an Underwriter of the Series 2016 Bonds, has entered into a retail distribution arrangement with its affiliate Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may distribute municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the Series 2016 Bonds.

Siebert Cisneros Shank & Co., L.L.C. (“SCS”) has entered into an agreement with Muriel Siebert & Co. for the retail distribution of certain securities offerings, at the original issue prices. Pursuant to said agreement, if applicable to the Series 2016 Bonds, Muriel Siebert & Co. will purchase Series 2016 Bonds at the original issue price less the selling concession with respect to any Series 2016 Bonds that Muriel Siebert & Co. sells. SCS will share a portion of its underwriting compensation with Muriel Siebert & Co., if applicable.

Wells Fargo Securities is the trade name for certain securities-related capital markets and investment banking services of Wells Fargo & Company and its subsidiaries, including Wells Fargo Bank, National Association, which conducts its municipal securities sales, trading and underwriting operations through the Wells Fargo Bank, NA Municipal Products Group, a separately identifiable department of Wells Fargo Bank, National Association, registered with the Securities and Exchange Commission as a municipal securities dealer pursuant to Section 15B(a) of the Securities Exchange Act of 1934.

Wells Fargo Bank, National Association, acting through its Municipal Products Group (“WFBNA”), one of the Underwriters of the Series 2016 Bonds, has entered into an agreement (the

"WFA Distribution Agreement") with its affiliate, Wells Fargo Advisors, LLC ("WFA"), for the distribution of certain municipal securities offerings, including the Series 2016 Bonds. Pursuant to the WFA Distribution Agreement, WFBNA will share a portion of its underwriting or remarketing agent compensation, as applicable, with respect to the Series 2016 Bonds with WFA. WFBNA has also entered into an agreement (the "WFSLLC Distribution Agreement") with its affiliate Wells Fargo Securities, LLC ("WFSLLC"), for the distribution of municipal securities offerings, including the Series 2016 Bonds. Pursuant to the WFSLLC Distribution Agreement, WFBNA pays a portion of WFSLLC's expenses based on its municipal securities transactions. WFBNA, WFSLLC, and WFA are each wholly-owned subsidiaries of Wells Fargo & Company.

FINANCIAL ADVISOR

Public Financial Management, Inc. is acting as Financial Advisor (the "Financial Advisor") to the Authority in connection with the issuance of the Series 2016 Bonds in connection with the issuance of the Series 2016 Bonds. The Financial Advisor's fee for services rendered with respect to the sale of the Series 2016 Bonds and the Series 2016 Bonds is not contingent upon the issuance and delivery of the Series 2016 Bonds and the Series 2016 Bonds. Public Financial Management, Inc., in its capacity as Financial Advisor, does not assume any responsibility for the information, covenants and representations contained in any of the legal documents with respect to the federal income tax status of the Series 2016 Bonds or the Series 2016 Bonds, or the possible impact of any present, pending or future actions taken by any legislative or judicial bodies. The Financial Advisor is a "*municipal advisor*" as defined in Rule 15Ba1-1-(d)(3)(vi) of the Securities and Exchange Commission.

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

CONTINUING DISCLOSURE UNDERTAKING

The Authority will covenant for the benefit of the Holders and the Beneficial Owners of the Series 2016 Bonds (as such terms are defined in the Continuing Disclosure Undertaking which the Authority expects to execute on or before the date of delivery of the Series 2016 Bonds (the "Continuing Disclosure Undertaking"), to disclose financial information and operating data, by not later than 270 days following the end of the applicable fiscal year, commencing with the report for fiscal years ending on or after June 30, 2016 (the "Annual Financial Information") and to provide notices of the occurrence of certain enumerated events, if material. The Continuing Disclosure Undertaking requires that the Annual Financial Information be filed with the Municipal Securities Rulemaking Board ("MSRB") by electronic transmission through the Electronic Municipal Market Access ("EMMA") Dataport of the MSRB. The Continuing Disclosure Undertaking also requires that notices of material events be filed by the Authority with the MSRB by electronic transmission through the EMMA Dataport. The specific nature of the information to be contained in the Annual Financial Information and the notices of material events is set forth in APPENDIX IX – FORM OF CONTINUING UNDERTAKING. These covenants have been made in order to assist the Underwriters named on the cover page of this Official Statement to comply with paragraph (b)(5) of Rule 15c2-12 (the "Rule") promulgated by the Securities and Exchange Commission.

Except as described in the Continuing Disclosure Undertaking the provisions of the Continuing Disclosure Undertaking will create no rights in any other person or entity. The obligation of the Authority to comply with the provisions of the Continuing Disclosure Undertaking is enforceable by any Beneficial Owner of outstanding Series 2016 Bonds as described in the Continuing Disclosure Undertaking. The right to enforce the provisions of the Continuing Disclosure Undertaking is limited to a

right, by action in mandamus or for specific performance, to compel performance of the Authority's obligations under the Continuing Disclosure Undertaking. Any failure by the Authority to perform in accordance with the Continuing Disclosure Undertaking will not constitute a default or an Event of Default under the Bond Ordinance, and the rights and remedies provided by the Bond Ordinance upon the occurrence of a default or an Event of Default will not apply to any such failure.

Prior to the Continuing Disclosure Undertaking with respect to the Series 2016 Bonds, the Authority had no previous undertakings to provide annual financial information or notices of material events pursuant to the Rule. For a description of the continuing disclosure undertakings of the City, as the obligor with respect to the DWSD Water Bonds prior to their assumption by GLWA, and the compliance by the City of such undertakings, see the current offering documents and continuing disclosure filings of the City filed on EMMA.

A failure by the Authority to comply with the Continuing Disclosure must be reported by the Authority in accordance with the Rule and must be considered by any broker, dealer or municipal securities dealer before recommending the purchase or sale of the Series 2016 Bonds in the secondary market. Consequently, such failure may adversely affect the marketability and liquidity of the Series 2016 Bonds and the market price thereof.

In order to provide continuing disclosure with respect to the Series 2016 Bonds in accordance with the Rule, the Authority has entered into a Disclosure Dissemination Agent Agreement ("Disclosure Dissemination Agreement") with Digital Assurance Certification, L.L.C. ("DAC"), under which the Authority has designated DAC as Disclosure Dissemination Agent.

The Disclosure Dissemination Agent has only the duties specifically set forth in the Disclosure Dissemination Agreement. The Disclosure Dissemination Agent's obligation to deliver the information at the times and with the contents described in the Disclosure Dissemination Agreement is limited to the extent the Authority has provided such information to the Disclosure Dissemination Agent as required by the Disclosure Dissemination Agreement. The Disclosure Dissemination Agent has no duty with respect to the content of any disclosures or notice made pursuant to the terms of the Disclosure Dissemination Agreement. The Disclosure Dissemination Agent has no duty or obligation to review or verify any information in the Annual Financial Information, Audited Financial Statements, notice of the occurrence of reportable events or voluntary disclosures, or any other information, disclosures or notices provided to it by the Authority and shall not be deemed to be acting in any fiduciary capacity for the Authority, the Bondholders or any other party. The Disclosure Dissemination Agent has no responsibility for the Authority's failure to report to the Disclosure Dissemination Agent a Notice Event or a duty to determine the materiality thereof. The Disclosure Dissemination Agent shall have no duty to determine or liability for failing to determine whether the Authority has complied with the Disclosure Dissemination Agreement. The Disclosure Dissemination Agent may conclusively rely upon certifications of the Authority at all times.

OTHER MATTERS

The summaries and explanations herein of provisions of the Bond Ordinance, the Lease, the Water and Sewer Services Agreement, the Shared Services Agreement, Act 94, Act 233 other public acts of Michigan, and other materials are brief summaries of certain provisions thereof. Such summaries do not purport to be complete and reference is made to such instruments, documents and other materials for full and complete statements of the provisions thereof.

The information contained in this Official Statement has been compiled or prepared from sources deemed to be reliable and, while not guaranteed as to completeness or accuracy, is believed to be correct as of this date. Any statements involving matters of opinion, whether or not expressly so stated, are intended as such and not as representations of fact.

The attached Appendices are an integral part of this Official Statement and must be read in their entirety together with all of the foregoing information.

The execution and delivery of this Official Statement have been duly authorized by the Authority.

GREAT LAKES WATER AUTHORITY

By: /s/ Sue F. McCormick
Chief Executive Officer

**SCHEDULE I
SCHEDULE OF REFUNDED BONDS**

SENIOR LIEN				
Series	Maturity	Par	CUSIP	Call Date
2003D	7/1/2017	\$225,000	2512552W4	11/14/16
2003D	7/1/2018	140,000	2512552X2	11/14/16
2003D	7/1/2024	1,500,000	2512552Y0	11/14/16
2003D	7/1/2027	10,695,000	2512552Z7	11/14/16
2003D	7/1/2028	23,390,000	2512553A1	11/14/16
2003D	7/1/2033	80,695,000	2512553B9	11/14/16
2004B	7/1/2017	780,000	2512554E2	11/14/16
2004B	7/1/2017	145,000	2512554F9	11/14/16
2004B	7/1/2018	6,055,000	2512554G7	11/14/16
2004B	7/1/2019	5,560,000	2512554H5	11/14/16
2004B	7/1/2022	905,000	2512554L6	11/14/16
2004B	7/1/2023	2,280,000	2512554M4	11/14/16
2005B	7/1/2019	2,310,000	2512557W9	7/1/18
2005B	7/1/2020	1,680,000	2512557X7	7/1/18
2005B	7/1/2021	2,880,000	2512557Y5	7/1/18
2005B	7/1/2022	2,225,000	2512557Z2	7/1/18
2005B	7/1/2023	3,125,000	2512558A6	7/1/18
2005B	7/1/2024	2,850,000	2512558B4	7/1/18
2005B	7/1/2025	3,490,000	2512558C2	7/1/18
2005B	7/1/2026	3,405,000	2512558D0	7/1/18
2005B	7/1/2027	3,800,000	2512558E8	7/1/18
2005B	7/1/2028	3,490,000	2512558F5	7/1/18
2005B	7/1/2034	27,870,000	2512558G3	7/1/18
2005B	7/1/2035	33,690,000	2512558H1	7/1/18
2005B	7/1/2035	57,170,000	2512558J7	7/1/18
2006A	7/1/2017	1,430,000	251255V69	11/14/16
2006A	7/1/2018	1,150,000	251255V77	11/14/16
2006A	7/1/2020	1,125,000	251255V93	11/14/16
2006A	7/1/2021	180,000	251255W27	11/14/16
2006A	7/1/2022	4,285,000	251255W35	11/14/16
2006A	7/1/2023	8,285,000	251255W43	11/14/16
2006A	7/1/2025	11,180,000	251255W68	11/14/16
2006A	7/1/2026	5,580,000	251255W76	11/14/16
2006A	7/1/2034	86,130,000	251255W84	11/14/16
2006D	7/1/2017	20,000	2512552B0	11/14/16
2006D	7/1/2018	20,000	2512552C8	11/14/16
2006D	7/1/2019	1,400,000	2512552D6	11/14/16
2006D	7/1/2020	2,235,000	2512552E4	11/14/16

2006D	7/1/2023	8,300,000	2512552F1	11/14/16
2006D	7/1/2024	255,000	2512552G9	11/14/16
2006D	7/1/2025	4,130,000	2512552H7	11/14/16
2006D	7/1/2032	20,125,000	2512552J3	11/14/16
2006D	7/1/2032	23,330,000	2512552K0	11/14/16

SECOND LIEN

Series	Maturity	Par	CUSIP	Call Date
2004A	7/1/2017	\$3,450,000	2512553K9	11/14/16
2004A	7/1/2018	700,000	2512553L7	11/14/16
2004A	7/1/2019	2,910,000	2512553M5	11/14/16
2004A	7/1/2020	1,360,000	2512553N3	11/14/16
2004A	7/1/2021	50,000	2512553P8	11/14/16
2004A	7/1/2022	4,665,000	2512553Q6	11/14/16
2004A	7/1/2023	4,535,000	2512553R4	11/14/16
2004A	7/1/2025	12,665,000	2512553S2	11/14/16
2006B	7/1/2023	215,000	251256AN3	7/1/19
2006B	7/1/2036	27,780,000	251256AP8	7/1/19
2006B	7/1/2036	57,255,000	251256AQ6	7/1/19
2006C	7/1/2017	3,075,000	251255Y33	11/14/16
2006C	7/1/2018	1,015,000	251255Y41	11/14/16
2006C	7/1/2022	5,010,000	251255Y58	11/14/16
2006C	7/1/2026	13,220,000	251255Y66	11/14/16
2006C	7/1/2029	31,770,000	251255Y74	11/14/16
2006C	7/1/2033	144,610,000	251255Y82	11/14/16

**APPENDIX I
FEASIBILITY CONSULTANT'S REPORT**

TFG
THE FOSTER GROUP

P.O. BOX 26282
LEAWOOD, KS 66225
TEL: (913) 345-1410
FAX: (913) 345-1640

THE FOSTER GROUP, LLC
BART FOSTER, PRESIDENT
CELL: (913) 530-6240
BFOSTER@FOSTERGROUPLLC.COM

October 14, 2016

Ms. Sue McCormick, Chief Executive Officer
Great Lakes Water Authority
735 Randolph Street
Detroit, Michigan 48226

Dear Ms. McCormick:

In accordance with our agreement with the Great Lakes Water Authority (the "Authority" and/or "GLWA"), we submit herewith our Financial Feasibility report to be included as an appendix to the official statement (the "Official Statement") prepared by the Authority in connection with its issuance of \$88,000,000 Water Supply System Revenue Senior Lien Bonds, Series 2016A, \$163,830,000 Water Supply System Revenue Second Lien Bonds, Series 2016B, \$443,930,000 Water Supply System Revenue Refunding Senior Lien Bonds, Series 2016C, and \$222,045,000 Water Supply System Revenue Refunding Second Lien Bonds, Series 2016D (collectively, the "Series 2016 Bonds"). The Series 2016 Bonds are being issued to generate approximately \$226 million of proceeds to finance Regional Water System capital improvements for the Authority, approximately \$57 million of proceeds to finance Local Water System capital improvements for the Detroit Water and Sewerage Department, and to refinance certain outstanding Bonds of the Authority. The purpose of this report is to set forth information concerning financial factors relating to the Official Statement and the Series 2016 Bonds.

The report contains financial feasibility information including analyses of water supply service charges, including specific charge methodology, projections of revenues under existing charges, projection of future operation and maintenance expenses, a summary of the Regional Water System Capital Improvement Program (the "CIP") for fiscal years 2017 through 2021, CIP financing, the impact of projected revenue requirements on future revenues and water supply charges for a five-year study period, and the ability of the Authority to meet the "Additional Bonds Test" as defined in the ordinance authorizing the issuance of bonds by the Authority (the "Master Bond Ordinance.") A listing of our major opinions developed as a result of our studies is presented at the end of the report.

THE FOSTER GROUP provides financial and engineering management consulting services to a broad customer base, specializing in services for municipal utility clients in the

United States. Our principal experience includes: managing financial planning, cost of service, and rate design studies for water and wastewater utilities; preparation of Feasibility Reports in conjunction with issuance of municipal water and sewer revenue bonds; development of other feasibility reports; design of financial management information systems; consulting assistance regarding contractual and other relationships amongst municipalities, and expert witness services in utility litigation matters.

Principals of THE FOSTER GROUP have prepared every financial feasibility report published in conjunction with the revenue bonds issued by the Detroit Water and Sewerage Department (the predecessor to the Authority) since 1989. Various reports have been issued in connection with work for the Authority on these matters and related matters, and are available for public inspection at the offices of the Authority.

It has been a pleasure to be of service to the Authority on this matter.

Very truly yours,

THE FOSTER GROUP

A handwritten signature in black ink, appearing to read 'Bart Foster', with a stylized flourish at the end.

Bart Foster
President

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INTRODUCTION

This report is based on our analysis of the records and capital improvement programs of the Authority, discussions with key Authority personnel, and such other investigations as we have found necessary.

In this report, where standards or requirements are indicated as being applicable, being fulfilled, or to be attained, such standards or requirements are those promulgated by the United States Environmental Protection Agency (the "EPA") and the Michigan Department of Environmental Quality (the "MDEQ") in accordance with the provisions of Federal laws and the laws of the State of Michigan governing the supply of drinking water. Capitalized terms not otherwise defined herein shall have the same meaning as ascribed to them in the Official Statement. References made herein to specific years are for the fiscal years ending June 30, unless otherwise noted.

The Authority was incorporated by the City of Detroit (the "City") and the Counties of Macomb, Oakland and Wayne (the "Counties") on November 26, 2014 pursuant to Act 233, Public Acts of Michigan, 1955, as amended ("Act 233"). At the time of the Authority's incorporation, the City, through its Detroit Water and Sewerage Department ("DWSD"), was providing wholesale water and sewer services to suburban wholesale customer communities and wholesale and retail water and sewer services to the City and its individual residents and businesses. Water service was provided via operation of the City's water supply system ("the Water System") that consisted of both wholesale and retail water production and delivery facilities.

On June 12, 2015, the City and GLWA executed a Regional Water Supply System Lease, a Regional Sewage Disposal System Lease and a Water and Sewer Services Agreement, and as of January 1, 2016, the City and GLWA executed a Shared Services Agreement (each as more fully described under "THE GREAT LAKES WATER AUTHORITY" in this Official Statement). These agreements became effective on January 1, 2016 (the "Effective Date"), at which time the Authority assumed responsibility for the wholesale water and sewer services to the service area via operation of the portion of the Water System (the "Regional Water System") that provides service to the wholesale water customers. The Authority also provides "wholesale" water and sewer service to the City of Detroit, although the City is served via a Water and Sewer Services Agreement that is different from standard wholesale contracts, and the City of Detroit is not a wholesale customer of the Authority.

The portion of the Water System that provides water service directly to retail customers in the City of Detroit (the "Local Water System") continues to be operated by the City of Detroit through DWSD, just as the Authority's wholesale customers provide retail services to their individual residents and businesses. The Authority's customers (the "Customers") include communities and districts served via wholesale service contracts and the City of Detroit retail customer class, served via the terms of the Water and Sewer Services Agreement. The Authority is authorized by its Articles of Incorporation to provide retail water service, but does not currently provide retail service to any customers.

Certain portions of this report may refer to historical wholesale service performance and events as being attributable to the Authority, while in fact they were applicable to the operations of the DWSD that existed prior to the Effective Date. We consider the attribution to be technically accurate, since the Authority has assumed responsibility for such performance and events.

The proceeds from the Series 2016 Bonds, along with available fund balances and internally generated funds will be utilized to finance capital improvement expenditures scheduled in the CIP through June 30, 2018 (the "2016 Project"). Additional proceeds from the Series 2016 Bonds will be transferred to a construction fund for DWSD that is under the sole and exclusive control of DWSD to finance capital improvements to the DWSD Local Water System. Proceeds from the refunding portion of the Series 2016 Bonds will be utilized to refinance certain outstanding bonds of the Authority. The remaining capital improvement expenditures scheduled in the CIP for the five-year period ending June 30, 2019 are expected to be principally financed with additional bond issues in 2019 and 2020, augmented by internally generated funds. *See "Capital Improvement Program Financing."*

In conducting our studies and formulating our projections and opinions contained herein, we reviewed the books, records, agreements, capital improvement programs and other information produced by the Authority as we deemed necessary. While we consider such books, records, and other documents to be reliable, we have not verified the accuracy of these documents.

The projections set forth herein are intended as "forward-looking statements". Actual results may differ materially from those projected, as influenced by conditions, events, and circumstances that may actually occur. *See "Financial Feasibility for the Series 2016 Bonds."*

REGIONAL WATER SYSTEM SUMMARY

Introduction

The water treatment and transmission system consists of three major intake facilities, five water treatment plants, a conveyance system that consists of over 803 miles of transmission mains throughout the system, 19 booster pumping stations, and 32 water storage reservoirs. The Systems Control Center monitors and controls the water flow and pressure throughout the Regional Water System.

SERVICE AREA

The Regional Water System is one of the largest in the nation in terms of water produced and population served, as the Authority is responsible for treatment and transmission of water to most of southeast Michigan. The System presently serves an area of 981 square miles in Wayne, Oakland, Macomb, Lapeer, Genesee, Washtenaw, St. Clair, and Monroe Counties. *See map, inside cover.* The Authority currently serves an estimated population of 3.8 million, with suburban customers served by wholesale service contracts comprising approximately 80 percent of the total, and the City of Detroit comprising the remainder.

The Authority has traditionally experienced no material competition from other water supply systems in the Southeastern Michigan region. However, Genesee County and the City of Flint (through which many of the other communities in Genesee County had traditionally purchased water from the System) formed the Karegnondi Water Authority (the “KWA”) in 2010 and have been constructing water intake structures, pipelines and pumping station capital investments needed by KWA to operate as a fully independent *raw* water supply system.

The City of Flint already had its own water treatment plant, which in past years was only utilized to provide standby service. Over time, Flint had explored the possibility of expanding the capabilities of its plant to provide full service to its retail customers within its jurisdictional boundaries. The contract between the Authority and Flint reached its original duration and the parties were unable to negotiate an extension. Flint opted to leave the System, and the Authority terminated the existing contract in April 2013, providing a one-year termination notice as required in the contract. The parties continued attempts to negotiate a new service agreement during the termination period, but were unsuccessful. Flint ceased purchasing water from the Water System on May 1, 2014 and began using water from the Flint River as a source of supply to treat at its plant. Flint’s plan was to eventually purchase raw KWA water and only use the Flint River as a back up supply. Flint’s exit from the Water System produced a negative revenue variance of about \$12.5 million, or about 3.5% of total Water System revenue during 2015.

Flint began experiencing water quality issues immediately upon separation from the Water System. The Authority expressed continued willingness to re-establish service to Flint, and on October 16, 2015, Flint signed a nine-month contract with the Authority for water service. The contract also provided that its term may be extended by mutual agreement of the parties. As part of this contract, Flint deposited \$10 million with the Authority as an estimated prepayment for service over the term of the contract. On a monthly basis, the Authority draws down from this deposit the amount equal to the amount invoiced to Flint. The original agreement contained provisions to monitor and adjust pre-payment amounts as necessary should the original \$10 million prove to be insufficient, and to return any remaining unneeded prepayment funds to Flint at the conclusion of the contract. Through the end of the original contract termination date, Flint had utilized approximately \$9.5 million of the original funding amount, which is recognized as revenue to the Authority during 2016.

The contract with Flint has been extended through June 30, 2017. Flint has agreed to continue to pre-pay for extended water service, and to replenish the prepayment fund for 2017 service in two installments. The first installment payment has been received and the second payment is scheduled to be deposited in October 2016. As a result of this extension, additional revenues of approximately \$13.3 million are projected to be realized in 2017, and additional revenues may be realized in future years, depending on construction timelines for the KWA pipeline.

Flint does not have the capacity to provide water to Genesee County. The Genesee County Drain Commission plans to construct new treatment facilities to purify raw KWA water and provide it to customers in the county. The KWA raw water facilities are substantially complete and being tested.. The Genesee County treatment facilities are under construction. The Authority believes that final construction of these facilities will not be complete until at least

June 30, 2017. In the interim Genesee County must continue to rely on the Authority for wholesale water service, and Genesee County continues to purchase water from the Authority on a “non-contract” basis. The parties had been engaged in negotiations to establish a formal agreement, but those negotiations failed to produce an agreement and the Authority does not anticipate any service to Genesee County after June 30, 2017, although that date is subject to construction schedules, potential additional negotiations, and other developments.

Flint and Genesee County (in total) currently account for approximately 6.4% of the Water System’s water sales volume and 7.6% of the Water System’s revenue. These sales volumes and revenues continue to be reflected in the projections in this report through 2017. *See “Financial Feasibility for the Series 2016 Bonds - Projection of Revenues.”*

Other small communities in the northern area of the System’s service area initially expressed various levels of interest in joining the KWA. The Authority has successfully executed new long-term wholesale contracts with each of these communities.

HISTORICAL WATER SALES AND NON-REVENUE WATER

A summary of historical water sales, water production, and “non-revenue” water (reported in thousands of cubic feet – “Mcf”) is presented in Table 1. Water sales declined significantly in recent years, driven in part by the effects of the 2008 recession. After stabilizing during 2011 and 2012, reported sales figures for 2013 through 2015 continued to decline for both suburban wholesale and Detroit retail customers. Reported sales volumes for each of these years were significantly lower than planned levels, the wholesale portion of which were directly based on amounts included in service contracts with customers. In part, the Authority attributes the lower than expected sales volumes to three straight years of abnormally mild summer weather conditions, which produced much lower outdoor water demands than experienced during “normalized” conditions. Higher demands occurred during this past summer, and reported water sales during 2016 indicate an increase over 2015, although part of this increase is attributable to Flint purchasing water during part of 2016, and not at all in 2015. However the Authority believes a portion of the lower sales volumes are indicative of changing attitudes towards water use being experienced universally throughout the country and throughout the entire year, and the impact of changing plumbing standards and fixtures such as low flow shower heads and toilets.

As part of the preparation of the 2016 budget and financial plan, the Authority altered its approach for projecting annual water sales levels, in an effort to eliminate continued lower than anticipated sales results and the associated revenue shortfall. *See “Financial Feasibility for the Series 2016 Bonds – Service Charge Methodology and Existing Service Charges.”*

Table 1
Water System Sales and Non-Revenue Water

	Fiscal Year Ending June 30,					
	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Water Sales Volumes - Mcf						<i>est</i>
Suburban Wholesale (a)	16,094,700	16,280,300	15,687,900	14,778,500	13,547,000	14,730,400
Detroit Retail (b)	4,176,600	3,903,100	3,660,300	3,410,600	3,173,700	3,086,400
Total	20,271,300	20,183,400	19,348,200	18,189,100	16,720,700	17,816,800
Total Water Production - Mcf	26,513,000	27,219,500	26,832,800	26,088,800	23,238,000	23,580,700
Non-Revenue Water - Mcf	6,241,700	7,036,100	7,484,600	7,899,700	6,517,300	5,763,900
Non-Revenue % of Production	23.5%	25.8%	27.9%	30.3%	28.0%	24.4%

(a) Reflects sales reported by wholesale master meters.

(b) Reflects sales reported by individual retail meters.

The Water System, as is common with all water systems, experiences a differential between the quantity of water produced by the treatment plants during the fiscal year and the quantity of water billed during that same period of time. The differential is referred to as "non-revenue water" and is the result of factors such as range of accuracy of production and retail meters, losses due to leaks or major breaks in the transmission and distribution system, unmetered water that is used for fire protection, and accuracy of estimates for unmetered water use.

The last row of Table 1 shows the non-revenue water as a percentage of total system production for the last six years. The Authority believes that recent reported levels of non-revenue water may be misleading, partially attributable to a change in the manner by which production at the water plants is reported. This production is not metered, but is rather estimated based on pump curves. These data continue to be reviewed, and the Authority has initiated efforts to measure production figures and refine production estimating techniques. Irrespective of the accuracy of the reported production levels, mitigating the reported level of non-revenue water is (and should be) a goal of the Authority, and of the DWSD Local Water System. Future reports of non-revenue water for 2017 and beyond will reflect the new arrangement between the Authority and DWSD, and the fact that the Authority is a provider of wholesale water service. For instance, the water use allocated to the Detroit retail customer class includes an estimate of unaccounted for water within the DWSD Local Water System, and this amount is included in the basis for allocating revenue requirements to the Detroit customer class. As such, it is not technically "non-revenue" water.

CAPITAL IMPROVEMENT PROGRAM

The Authority's System Planning Division is responsible for coordinating the evaluation of capital needs and developing programs to meet those needs. This division formally reviews the Capital Improvement Program and incorporates revisions into the five-year capital agenda on an annual basis.

In accordance with the terms of the Articles of Incorporation, the CIP must be approved by a supermajority of at least five members of the Authority's Board of Directors. The Authority can modify individual projects within the CIP during the year to address changing costs and management decisions on specific project scope as long as the changes are within the basic framework approved by the Board. The Fiscal Year 2017-2021 CIP was approved by the Board on May 25, 2016.

The CIP is dynamic and requires continual review and modification during the course of each year. As additional cost information is developed from design work being performed on the various projects, cost estimates are adjusted accordingly. In connection with the issuance of the Series 2016 Bonds, the CIP has been updated to reflect modified plans and individual project activity subsequent to approval of the original CIP. An amended Fiscal Year 2017-2021 CIP was approved by the Authority Board on September 14, 2016.

A summary of the amended water CIP is presented in Table 2. The CIP is divided into major categories representing each of the five water plants, water delivery categories of transmission and pumping stations and reservoirs, computer systems, and general purpose. Expenditures in the early years of the CIP are primarily focused on rehabilitating the Springwells Water Treatment Plant, which currently produces the most water of any of the five plants, and on improvements to water delivery facilities, designed to enhance reliability of service and to facilitate the planned repurposing of the Northeast Water Plant. *See "THE MASTER PLAN AND THE CAPITAL IMPROVEMENT PLAN" in this Official Statement. Table 2 does not include any capital improvements to the local water service facilities owned and managed by DWSD.*

The recently completed Master Plan Update was somewhat unique, in that it was designed to establish a strategic infrastructure and operating plan associated with declining water demands, rather than to address growth. The total rated capacity of the existing five water treatment plants is 1.7 billion gallons per day. The Master Plan Update identified likely maximum demands in the range of 1.0 billion gallons per day during the 20-year planning period, and evaluated the possibility of repurposing one or more water treatment plants to strategically align available capacity and service requirements and planning for structural de-rating of capacity as warranted at the remaining four water treatment plants. The Master Plan recommends converting the existing Northeast Water Plant into a storage and pumping facility, thereby eliminating the need to invest in improvements that would otherwise be required for the existing facility to maintain rated capacity. The Master Plan also contains investments designed to strategically deliver water to the System via the four remaining water treatment plants. The initial projected expenditures required to implement this revised operating scenario envisioned by the Master Plan are included in Table 2, and the Authority anticipates that the new reduced capacity plan will be operational by 2021 to 2023. While the new operating scenario will likely result in operating expense savings, none have been assumed in the projections presented in this report.

Table 2
Regional Water System Capital Improvement Program
Projected Expenditure Schedule - Fiscal Years 2017 through 2021

<u>Category</u>	<i>Fiscal Year Ending June 30,</i>					<u>Total</u>
	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	
	\$	\$	\$	\$	\$	\$
<u>Water Production</u>						
Water Works Park	2,475,000	5,875,000	27,900,000	20,500,000	0	56,750,000
Springwells	28,753,000	28,630,000	33,000,000	25,600,000	10,300,000	126,283,000
Northeast	100,000	880,000	0	0	0	980,000
Southwest	3,853,000	3,160,000	2,150,000	900,000	0	10,063,000
Lake Huron	6,300,000	17,278,000	18,505,000	6,203,000	200,000	48,486,000
General Water Treatment	29,944,000	37,449,000	38,936,300	24,333,300	10,833,300	141,495,900
Subtotal Production	71,425,000	93,272,000	120,491,300	77,536,300	21,333,300	384,057,900
<u>Water Delivery</u>						
Water Transmission System	45,137,000	37,656,000	62,900,000	92,250,000	84,700,000	322,643,000
Pumping Station & Reservoirs	5,141,000	5,468,000	6,000,000	2,900,000	2,500,000	22,009,000
Subtotal Delivery	50,278,000	43,124,000	68,900,000	95,150,000	87,200,000	344,652,000
Computer Systems	3,828,000	3,748,000	3,425,000	1,000,000	1,050,000	13,051,000
General Purpose	4,701,000	4,701,000	425,000	250,000	250,000	10,327,000
Subtotal General	8,529,000	8,449,000	3,850,000	1,250,000	1,300,000	23,378,000
TOTAL	130,232,000	144,845,000	193,241,300	173,936,300	109,833,300	752,087,900

The Authority has initiated efforts to develop a new CIP as part of the 2018 budget preparation, with ultimate adoption scheduled for March 2017. Preliminary versions of that new CIP are being prepared for Customer and stakeholder review. While the projected expenditure levels in various years are expected to change in order to reflect variations in project schedules, and the stakeholder review process may identify modifications to preliminary plans, the Authority is not aware of any changes that would result in material differences in the overall five-year expenditure levels in the preliminary versions of the new CIP from those indicated in this Report.

FINANCIAL FEASIBILITY FOR THE SERIES 2016 BONDS

The financial data used in the analyses presented herein were obtained from the financial records of the Authority and of DWSD. The financial records of the prior DWSD were audited annually and maintained in conformity with generally accepted accounting principles for water and wastewater utilities, and financial records of both the Authority and DWSD are subject to annual audits.

The projections set forth herein are intended as “forward-looking statements”. In formulating these projections, The Foster Group has made certain assumptions with respect to conditions, events, and circumstances that may occur in the future. The methodology utilized by The Foster Group in performing these analyses follows generally accepted practices for such projections. Such methodologies are summarized in this report and are reasonable and appropriate for the purpose for which they are used. While The Foster Group believes the assumptions are reasonable and the projection methodology valid, actual results may differ materially from those projected, as influenced by conditions, events, and circumstances that may actually occur. Such factors may include the Authority’s ability to execute the CIP as scheduled and within budget, regional climate and weather conditions affecting the demand for water, and adverse legislative, regulatory or legal decisions (including environmental laws and regulations) affecting the Authority’s ability to manage the Regional Water System and maintain water quality.

GLWA Financial Planning Guiding Principles

The financial plans developed for the Authority’s Water and Sewer Funds follow the guiding principles set forth in the various organizational documents, including the Articles of Incorporation, the Authority By-Laws, the Leases, the Water and Sewer Services Agreement with the City of Detroit, and the Master Bond Ordinances. The financial projections presented herein embrace these principles, which include:

- The Authority is empowered through its Board of Directors (the "Board") to provide wholesale water and wastewater service to the service area. The six member Board has the authority to execute contracts, to set policy for the Authority, to establish service charges for wholesale water and wastewater service, and to set a revenue requirement for the Detroit retail customer class¹.
- The Board must appoint an Audit Committee to “*review the reports related to the financial condition, operations, performance and management of the Authority*” on a regular basis.
- Certain actions by the Authority Board require “*the affirmative vote of at least 5 members of the Board.*” The elements which require this supermajority approval include, but are not limited to, service charge schedules, annual operating budgets, capital improvement programs, and issuance of debt.
- The Authority must establish biennial budgets, with the first year serving as formal authorization (including an approved schedule of service charges to support the

¹ The Authority has engaged the City of Detroit as its agent to establish retail water and sewer rates for the Detroit retail customer class, and to bill and collect for service from that class. The Authority retains oversight responsibility for these activities through monitoring of the agency relationship.

budget) and the second year serving as an initial estimate of revenues and revenue requirements.

- Through 2025, the Water (and Sewer) System “*is assumed to experience annual increases in the Authority Revenue Requirement of not more than 4%; provided however, this limitation shall not be applicable if the Authority Revenue Requirement must increase beyond the 4% assumption in order to satisfy the Rate Covenant or to pay the cost of improvements to the Leased Water Facilities that are required to be made by Applicable Laws.*”
- In accordance with the City’s Plan of Adjustment, the Authority will provide annual contributions for Pension Obligations in an amount of \$45.4 million (which includes annual administrative fees of \$2.5 million) through 2023². \$24 million of this amount will be treated as an operating expense, and funded via the Pension Obligation sub account of the Operation and Maintenance Fund. The remaining \$21.4 million will be treated as non-operating expense and funded via the Pension Obligation Payment Fund, which is subordinate to the debt service payment funds. The Water System’s share of the amounts above are \$10.3 million and \$9.2 million, respectively.
- ALL revenues, including revenues from retail customers of the City of Detroit, are deposited into a trust established under the Master Bond Ordinance (the “Trust”) and held by a trustee and subsequently applied to a flow of funds as set forth in summary fashion below:
 - Operation and Maintenance Fund, including separate accounts for the Authority Regional Water System and Detroit Local Water System operations, and including separate subaccounts for the “operating portion” of the Pension Obligation, separated by Authority Regional and Detroit Local portions; ***The accounts of the Operation and Maintenance Fund are the only monies held outside the Trust;***
 - Bond and Interest Redemption Funds, in cascading lien order, and including debt service accounts and bond reserve accounts;
 - Pension Obligation Payment Fund, to provide for funding of the Water System’s share of the “non-operating portion” of the Pension Obligation and obligation for the B and C Notes;
 - Water Residential Assistance Program (WRAP) Fund established to provide bill payment assistance to residents throughout the service area;
 - Budget Stabilization Fund established as a reserve to manage collection performance of the Detroit retail customer class;
 - Extraordinary Repair and Replacement Reserve Fund established as a reserve to pay the costs of making major unanticipated repairs or replacements;
 - Improvement and Extension (I&E) Fund established to pay for improvements, enlargements, or extensions; separate subaccounts established for the Regional Water System and the Local Water System.
 - Surplus Fund established to accommodate flexibility in managing the overall flow of funds.
- An annual Lease Payment of \$50 million (of which the Regional Water System’s share is \$22.5 million). The Lease Payment is to be deposited into the Local Water

² The agreement contemplates a “true-up” adjustment in 2024 to reconcile with final actuarial analyses and to finalize the Authority’s Pension Obligation.

System I&E Account, except in circumstances whereby the City applies a portion of the annual Lease Payment to pay a portion of its share of debt service. If the City elects to apply a portion of the Lease Payment to pay debt service, the total revenue requirement allocated to the City of Detroit retail customer class would be reduced accordingly.

These principles have been embraced in the initial financial plan established by the Authority, which serves as the guiding platform for the projections presented in this report. A discussion regarding the funding requirements of each element of the funds within the Trust is presented in the financial plan. *See “Operational Financing Plan.”*

The Board adopted the Great Lakes Water Authority FY 2017 and 2018 Biennial Budget on May 25, 2016. The biennial budget establishes a formal authorization for 2017, including an approved schedule of service charges to support the budget, and an initial estimate for 2018. The budget includes several depictions of the overall financial plans, including a schedule that reflects “Sources of Revenues and Use of Revenue Requirements – Flow of Funds Basis per Master Bond Ordinance.” That *consolidated* schedule includes elements related to the entire Water System, including wholesale service requirements of the Authority, as well as the retail service requirements of DWSD, and recognizes that all receipts from both organizations flow through the Master Bond Ordinance flow of funds. The projections in this report reflect the consolidated depiction of Authority revenue requirements for the entire Water System described above.

[Additional information regarding organizational documents and related initiatives is contained in “THE GREAT LAKES WATER AUTHORITY” section of this Official Statement.]

Service Charge Methodology and Existing Service Charges

The Authority's water service charges are developed to provide sufficient levels of revenue to meet all operation and maintenance expenses of the Water System, debt service requirements on obligations issued for the Water System, capital improvement expenditures to be funded from current revenues, and other specific bond ordinance and revenue requirements. A schedule of wholesale water service charges is developed for each wholesale Customer, and an annual revenue requirement is established for the City of Detroit retail customer class, by determining the total costs of service and individual customer water service requirements. All Customers are proportionally allocated costs of service based on their use of the Regional Water System, as measured by each Customer's water usage, demands on the Regional Water System, and the distance and elevation relative to the water treatment plants.

The Authority's water cost of service allocation and service charge methodologies were developed in conjunction with its Customers as part of the design of the model contract originally implemented in 2010. The cost allocation and service charge methodologies are sound and strive to utilize the best available, verifiable information to allocate costs to individual Customers in the most equitable fashion possible. Customers are allocated costs based, in large part, on the demands they place on the system, and those demands are set forth in each Customer's contract.

The current water service charges became effective July 1, 2016 and were designed to generate an overall revenue increase of approximately 4.5 percent over revenues generated by the previous year's charges. Four percent of this increase was designed to support an overall increase of four percent in the Water System's annual revenue requirement for 2017. The remaining approximate 0.5% was designed to recognize lower water sales expected for 2017 compared with 2016. As described below, the wholesale service structure consists of commodity and fixed portions, which are unique for each Customer. The average unit cost of the charge structure for the wholesale customer class at large is \$22.55 per thousand cubic feet.

The water service charges established for 2017 were developed in alignment with traditional cost of service principles that have been in place for over 30 years, although there are some notable modifications that emerged from the establishment of the Authority. These changes originally impacted the 2016 service charges previously established by DWSD, and continue for the 2017 service charges established by the Authority.

Modifications Resulting from the Lease

Prior to 2016, water cost allocations and charge schedules for wholesale customers have been developed on the "utility" basis, in conformance with State of Michigan statutes. Under the "utility" basis, a schedule of charges is developed for each wholesale customer that is designed to recover allocated cost of service responsibility as represented by operation and maintenance expense, depreciation expense, and a return on the investment the City had made in wholesale service facilities. The rate of return charged to wholesale customers generally averaged between six and seven percent in recent years. Water rates for retail customers within the City of Detroit were determined in the same manner, except that the rate of return was calculated to meet the Water System's cash requirements. The rate of return charged to City of Detroit customers was generally lower than that charged to wholesale customers, reflecting the City's ownership of the Water System and the associated risks, rights, and responsibilities of investing in regional water service facilities. In recent years, this annual "ownership benefit" was valued at approximately \$20.7 million. In effect, that amount reflects an amount that is reduced from the cost of service initially allocated to the City of Detroit retail class, and added to the Suburban Wholesale class at large, prior to determining final cost responsibility and schedules of charges.

The Lease contains a directive to "lock in" the ownership benefit at the \$20.7 million figure. The water service charges adopted for 2016 reflect the first year that formally reflects this provision. The principles of the utility basis remain in place, but rather than determining relative owner and non-owner rates of return on an annual basis, the resulting differential is fixed. The \$20.7 million adjustment was also applied in development of the 2017 water service charges.

Structural Wholesale Charge Reforms

In recent years the structure of the wholesale charge schedules has been modified to recover more costs through a fixed component of the charge structure, and less through a commodity charge. This initiative is designed to more closely align the manner in which costs of service are allocated to customers and the manner in which such costs are recovered from customers, thereby further enhancing the water rate structure. In 2010 charges were designed to recover the entire wholesale revenue requirement through commodity charges. The 2011 charges reflected the first step in a phased approach and recovered approximately 10 percent of the revenue requirement through fixed charges. This portion was increased to approximately 27 percent in 2012 and to approximately 40 percent in 2013, where it remained through 2015. In addition to enhanced cost allocation and cost recovery alignment, this initiative also dampens seasonal and annual fluctuations in Water System revenues.

As noted earlier, reported sales volumes in recent years were significantly lower than planned levels, particularly during summer months and the traditional high levels of outdoor irrigation. Although downward adjustments in projected sales volumes were made each year, the still lower than anticipated water sales led to consistent revenue shortfalls, and the prior DWSD Board challenged management and customers to establish fundamental structural reforms similar in nature to the “Sewer Rate Simplification” initiative that was implemented for the 2015 sewer charges.

As part of the development of the 2016 water service charges, Authority management worked closely with customer representatives to recommend two fundamental modifications designed to provide enhanced equitability and revenue stability to the wholesale water service charge schedules.

- 1. Rather than relying on planning level estimates in customer contracts to develop revenue estimates and related financial plans, a uniform forecasting method was designed. Estimated 2016 water sales volumes for each Customer (including the City of Detroit retail class) reflected the 24-month average ending September 2014. This time period covers two of the mildest summers on record. For the wholesale class in total, the revised approach lowered projected sales volumes by over 10 percent. The resulting projected revenues were much less susceptible to abnormally low water sales volumes.*
- 2. The portion of the allocated revenue requirement recovered through fixed monthly charges was increased to 60% from 40%. As a result, any future variances in water sales volume will have far less impact on annual revenue levels.*

The recommended modifications were accepted and incorporated into the 2016 water service charges. The actual reported billings to wholesale customers during 2016 indicate that the service charge structural reforms have produced initial success. For the first time this century, water sales volumes to wholesale customers exceeded planned levels during 2016, producing a positive revenue variance (compared to budgeted levels) of approximately \$2.4 million³.

³ This positive revenue variance was further augmented by Flint’s reconnection to the Regional Water System, which produced approximately \$9.5 million of “unbudgeted” revenue during 2016.

The new structure was also utilized to develop the water service charges for 2017, which are in place today. The Authority anticipates that analysis of future water charges will evaluate the most recent water sales data and will continue to reflect the uniform forecasting approach. The Authority does not endorse converting to a full fixed charge rate structure, as was implemented for the suburban wholesale sewer charges. While future analyses may result in further modifications to the fixed / commodity approach, the new allocation reflects a reasonable and responsible balance and should continue to stabilize revenues.

Projection of Revenues

Table 3 presents projected operating revenues for 2017 through 2021. These projections reflect a baseline condition assuming that the existing 2017 water charges remain in effect for the duration of the study period (i.e., no revenue adjustments). Projected modifications to these charges and revenue levels will be discussed subsequently in Table 6. The Authority's financial records account for revenue based on all volume billed at the appropriate fiscal year charges and as such approximately reflect treated water pumped during the fiscal year. The projections shown in Table 3 are developed on the same basis.

Table 3
Projected Water System Sales and Revenues Under Existing Charges (a)

Line No.		Fiscal Year Ending June 30,				
		<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
		\$	\$	\$	\$	\$
	<u>Wholesale Customers</u>					
1	Flint	13,303,200				
2	Genesee County	18,224,900				
3	All Other Wholesale Customers	<u>295,883,400</u>	<u>295,983,600</u>	<u>295,028,200</u>	<u>294,077,300</u>	<u>293,129,900</u>
4	Total Wholesale	327,411,500	295,983,600	295,028,200	294,077,300	293,129,900
	<u>Detroit Retail Customer Class</u>					
5	Revenue from Rates and Charges	87,844,900	84,942,300	82,800,000	80,720,500	78,700,000
6	Miscellaneous Revenue	<u>4,750,000</u>	<u>4,750,000</u>	<u>4,750,000</u>	<u>4,750,000</u>	<u>4,750,000</u>
7	Total Revenue from Detroit	92,594,900	89,692,300	87,550,000	85,470,500	83,450,000
8	Total Operating Revenue	420,006,400	385,675,900	382,578,200	379,547,800	376,579,900
	<i>Revenues are based on projected water sales in thousands of cubic feet (Mcf) of:</i>					
9	Flint	600,000				
10	Genesee County	523,000				
11	All Other Wholesale	13,383,600	13,383,600	13,276,000	13,168,900	13,062,200
12	Detroit Retail Customer Class	<u>3,034,000</u>	<u>2,958,200</u>	<u>2,884,200</u>	<u>2,812,100</u>	<u>2,741,800</u>
13	Total Sales (Mcf)	17,540,600	16,341,800	16,160,200	15,981,000	15,804,000

(a) Based on application of FY 2017 charges for 2017 through 2021. Net of projected bad debt expense.

Table 3 also presents the projected sales volumes upon which the commodity charge portion of the projected water revenues are based, and separates the portion of the wholesale customer class revenues and sales that are associated with Flint and Genesee County. As previously noted, these projections assume revenues from both of these customers for the entirety of 2017, and no sales or revenues thereafter resulting in a revenue reduction of approximately 6.5% of total Water System revenues. See "Service Area."

The projected 2017 revenues of approximately \$13.3 million from Flint were not anticipated at the time the FY 2017 and 2018 Biennial Budget was prepared, and when the current water service charges were developed and approved. Therefore the existing service charges to all customers already contemplate the loss of revenue associated with Flint, and Flint's ultimate departure from the Regional Water System will not result in a service charge adjustment to other customers. Flint has agreed to continue to pre-pay for extended water service, and is replenishing the prepayment fund for 2017 service in two installments. The first installment payment has been received and the second payment is

scheduled to be deposited in October 2016.

Genesee County's expected departure in 2018 will result in a negative revenue variance of approximately \$18.2 million. This figure represents approximately 4.4 percent of all revenue from charges. The variable costs of providing water to Flint and Genesee County are not material, and absent offsetting additional savings in the short term, this revenue shortfall will need to be recovered from all other customers. *See "Operational Financing Plan."*

These revenue projections do not include any revenue from the City of Highland Park, a wholesale customer with a delinquent balance of close to \$3.6 million. Highland Park began utilizing water from the Authority in January 2013 on an "interim non-contract" emergency basis and has not made a payment for water provided in over three years. Suburban wholesale revenues for 2016 and the remainder of the study period reflect application of the existing commodity charges to the projected sales volumes, and adding the revenue associated with the fixed monthly charges of the charge structure. The projected operating revenue from suburban wholesale customers assumes no collection from Highland Park, despite the fact that the Authority has taken legal action to recover the delinquent balance and ongoing bills for service, having received a favorable lower court judgment, subsequently stayed, pending action by the Michigan Supreme Court.

The projected water sales for 2017 reflect the uniform forecasting method introduced above. Projected sales volumes for 2018 through 2021 reflect the "most probable" scenario assumptions from the Master Plan findings. Under this scenario, the service population is projected to decline 0.55% annually for the suburban wholesale customer class and 0.75% annually for the Detroit retail customer class during the projection period. In addition, "usage per capita" is projected to decline 0.27% annually from current levels during the projection period, which produces annual reductions in sales volume expectations of approximately 0.8% for the suburban wholesale class and approximately 2.5% for the Detroit retail class. The projected annual revenue reductions are less than the projected sales volume reductions due to the fixed charge element in the charge structure, which reflects 60% of suburban wholesale water revenues and approximately 30% of Detroit retail water revenues.

The revenue projections for the retail class are reflected on a modified cash basis reflecting estimated billed revenues less an allowance for bad debt expense that was developed based on a review of recent collection results. Analysis of recent data indicates a collection rate of approximately 87 percent of all billed revenue to retail customers, and that metric has been used for these projections. Miscellaneous Operating Revenue includes revenues generated through the sale of equipment, penalty charges,

turn-on and shut-off fees, fire hydrant maintenance, and other operations.

Operation and Maintenance Expense Projections

Table 4 presents projected operation and maintenance expense, and certain non-operating expenses related to financing legacy employee benefit obligations, for 2017 through 2021. Projections for 2017 and 2018 are equal to the amounts reflected in the initial biennial budget adopted by the Authority, and serve as a baseline for the remaining years. The expenses in this table reflect amounts for both Authority wholesale service and DWSD retail service.

The annual “normal” operating expenses of the Regional Water System are reflected on Lines 1 through 13. The projections include preliminary detailed evaluation of expected programmatic evolution regarding staffing plans and use of contractual resources. In general, these projections anticipate a gradual growth in internal staffing (and therefore in salaries and wages) and a gradual phase out of personal service contracts. The Authority continues to pursue implementation of programs designed to improve efficiency and produce operating expense savings, and it is possible that such savings will emerge during the projection period, particularly in the non-personnel cost categories. However, given the complexities of standing up two new operational entities, we believe it is prudent to not reflect any such savings for purposes of these projections, pending additional developments. The Authority operating expenses include an “unallocated reserve” on Line 12 designed to acknowledge the dynamic operational structure of a brand new entity and to address unforeseen operational needs. In particular, the biennial budget for 2017 and 2018 placed downward pressure on individual budgetary lines to remove contingencies that were previously within individual departments. The Authority has pledged to align use of the unallocated reserve with a new fiscal note process to increase accountability. The total “normal” operation and maintenance expenses for the Authority are shown on Line 13, and are projected to increase approximately 2.7% annually after 2018.

The projected operating budget for DWSD Local Water System operation and maintenance expense is shown on Line 14. This line item reflects amounts collected via retail rates charged to the Detroit retail customer class and transferred to the Detroit Local Operation and Maintenance Account to fund local operating expenses. The amounts are effectively “pass through” revenue requirements for the Authority. For purposes of these projections we have assumed an annual increase of three percent starting in 2019. Line 15 indicates the projected combined annual operation and maintenance expense for both entities, and represents the projected amount of revenues that will be transferred to the Operation and Maintenance Fund for each year related to current operating expenses of the Water System.

Table 4
Projected Operation and Maintenance Expense (and Selected Non-Operating Expenses)

Line No.		<i>Fiscal Year Ended June 30,</i>				
		<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
		\$	\$	\$	\$	\$
1	Salaries & Wages	15,888,600	16,683,400	17,495,300	18,214,300	18,960,800
2	Overtime	2,384,600	2,364,900	2,402,400	2,450,500	2,499,500
3	Employee Benefits	5,775,700	6,059,700	6,299,000	6,622,000	6,962,200
4	Subtotal Personnel	24,048,900	25,108,000	26,196,700	27,286,800	28,422,500
5	Personal (Transitional) Service Contracts	5,658,200	5,953,600	5,531,700	5,064,600	4,564,500
6	TOTAL Personnel Costs	29,707,100	31,061,600	31,728,400	32,351,400	32,987,000
7	Contractual/Purchased Services	28,882,500	28,111,900	28,883,000	29,749,500	30,642,000
8	Utilities	33,643,000	32,659,500	33,639,300	34,648,400	35,688,000
9	Chemicals	6,192,500	6,192,500	6,378,200	6,569,600	6,766,700
10	Supplies & Other	10,316,900	9,964,800	10,263,800	10,571,700	10,888,800
11	Subtotal	108,742,000	107,990,300	110,892,700	113,890,600	116,972,500
12	Unallocated Reserve	3,137,400	8,364,200	8,871,400	9,111,200	9,357,800
13	Total "Normal" GLWA O&M	111,879,400	116,354,500	119,764,100	123,001,800	126,330,300
14	DWSD Local O&M	33,596,300	34,013,600	34,836,600	35,881,700	36,958,200
15	Combined Total "Normal" O&M	145,475,700	150,368,100	154,600,700	158,883,500	163,288,500
	<u>Operating Pension Reimbursement (a)</u>					
16	GLWA Regional	6,037,100	6,037,100	6,037,100	6,037,100	6,037,100
17	DWSD Local	4,262,900	4,262,900	4,262,900	4,262,900	4,262,900
18	Total	10,300,000	10,300,000	10,300,000	10,300,000	10,300,000
19	GRAND TOTAL O&M	155,775,700	160,668,100	164,900,700	169,183,500	173,588,500
	<u>Non-Operating Expense (b)</u>					
20	Non-Operating Portion of Pension Reimb.	9,200,000	9,200,000	9,200,000	9,200,000	9,200,000
21	B & C Note Non-Operating Payments	1,712,700	1,712,700	1,712,800	1,712,800	1,712,800
22	Transfer to Pension Obligation Payment Fund	10,912,700	10,912,700	10,912,800	10,912,800	10,912,800

(a) Transferred to Pension Obligation sub-account of the Operation and Maintenance Fund, and treated as Operation and Maintenance Expense for purposes of Net Revenue determination.

(b) **Not** treated as Operation and Maintenance Expense for purposes of Net Revenue determination.

As noted above, the operation and maintenance expenses also include deposits to the Pension Obligation subaccounts of the Operation and Maintenance Fund, which total \$10.3 million annually for the Water System, and which are shown on Lines 16 and 17 of Table 4. The remaining Water System \$9.2 million annual contribution to the Pension Obligation Payment Fund is shown as a non-operating expense on Line 20, and the Water System's allocated share of the B and C Notes issued by the City of Detroit to finance other post employment benefits settled by Detroit's Plan of Adjustment are shown on Line 21. The Water System's allocated share of the annual \$45.4 million combined annual contribution to the GRS pension plan totals \$19.5 million, as reflected on Lines 18 and 20 of Table 4. These deposits are designed to end in 2023, although the Plan of Adjustment stipulates that the final resolution of the obligation will be subject to a true-up analysis.

Capital Improvement Program Financing Plan

Table 5 presents a plan for financing the Regional Water System CIP (Line 1) for the study period. Traditionally, the Water System's capital financing strategies followed a "maximum debt financing" strategy. In essence, within the constraints of the Additional Bonds Test and the Water System's debt service coverage policies, the amount of bonds to be issued was designed to maximize the capital requirements financed with bond proceeds. Recently, Authority management (with support of the Board) has modified the traditional strategy and established a long term goal of reducing the Water System's significant reliance on debt for capital financing and has indicated management's intent to shift towards a more balanced debt/revenue financing approach. The capital financing plan presented herein is designed to continue implementation of that more balanced approach. Customer representatives have embraced this planning strategy as being essential to improving the financial position of the Water System.

Lines 2 through 19 outline the sources available to meet the CIP financing requirements. Line 2 shows the estimated net balance in the Authority Improvement and Extension ("I&E") Fund as of June 30, 2016, which is available to fund the CIP. Line 3 shows the amount projected to be transferred to the I&E Fund each year from current operating revenues. Total funds available from the I&E Fund are indicated on Line 4. For planning purposes, revenue transfers to the I&E Fund are not assumed to be eligible to finance capital improvements until at least the year subsequent to their generation.

The capital financing available from the Authority Construction Fund is indicated on Lines 5 through 17. Line 5 shows the estimated net balance in the Construction Fund as of June 30, 2016, which is available to fund the CIP. The total amount of the Series 2016 Bonds are shown on Line 6 of the 2017 column of Table 5. Lines 7 through 9 indicate additional sources of funds for the 2016 transaction, and amounts required to defease the 2016 Refunded Bonds are shown on Line 10. In addition refunding outstanding bonds, the Series 2016 Bonds are designed to provide approximately \$283 million of proceeds to finance capital improvements, \$57 million of which are committed to be transferred to the DWSD Construction Fund to finance improvements to the DWSD Local Water System. The remaining total of approximately \$226 million will be utilized to finance expenditures in the Regional Water System CIP through June 30, 2018 (the "2016 Project"). The capital financing plan presented in Table 5 envisions issuances of additional revenue bonds in 2019 and 2020 to finance additional expenditures in the Authority CIP. For planning purposes, these projected additional bonds do not include any proceeds to finance expenditures for the DWSD Local Water System. To the extent that DWSD opts to pursue financing of local system projects through Authority revenue bond transactions, these projections would change. While the Authority is responsible for the debt service on bonds issued to finance capital improvements to the DWSD Local Water System, the annual principal and interest requirements are included in the revenue requirements assigned to the City of Detroit customer class.

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Table 5
Capital Improvement Program Financing

Line No.	Item	Fiscal Year Ending June 30,					Total
		2017	2018	2019	2020	2021	
		\$	\$	\$	\$	\$	\$
Financing Requirements							
1	Capital Improvement Program (a)	130,232,000	144,845,000	193,242,000	173,936,000	109,833,000	752,088,000
Financing Sources							
<u>Improvement and Extension (I&E) Fund</u>							
2	Beginning Balance (b)	68,000,000	90,219,200	98,118,700	108,718,100	108,165,900	68,000,000 (h)
3	Revenue Financed Capital	<u>52,219,200</u>	<u>47,899,500</u>	<u>55,599,400</u>	<u>49,447,800</u>	<u>53,397,600</u>	<u>258,563,500</u>
4	Subtotal - Improvement & Extension Fund	120,219,200	138,118,700	153,718,100	158,165,900	161,563,500	326,563,500
<u>Construction Bond Funds</u>							
5	Beginning Balance (b)	13,000,000	138,651,000	33,806,000	73,564,000	137,628,000	13,000,000 (i)
Bond Proceeds							
6	Water System Revenue Bonds (c)	917,805,000	0	200,000,000	200,000,000	0	1,317,805,000
7	Original Issue Premium	139,113,300					139,113,300
8	Available Debt Service Payment Funds	16,458,900					16,458,900
9	Available in Debt Service Reserve Funds	25,163,000					25,163,000
10	Less: Defeasance Requirements (d)	(811,343,600)					(811,343,600)
11	Less: Transfer to DWSD Const. Fund (e)	(56,995,800)	0	0	0	0	(56,995,800)
12	Less: Bond Reserve Requirements (f)	0	0	(10,700,000)	(10,700,000)	0	(21,400,000)
13	Less: Issuance Expenses	<u>(4,317,800)</u>	<u>0</u>	<u>(1,300,000)</u>	<u>(1,300,000)</u>	<u>0</u>	<u>(6,917,800)</u>
14	Net Bond Proceeds Available	225,883,000	0	188,000,000	188,000,000	0	601,883,000
15	State Drinking Water Revolving Fund Loans	16,000,000	17,000,000	0	0	0	33,000,000
16	Less: Transfer to DWSD Constr. Fund	<u>(16,000,000)</u>	<u>(17,000,000)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>(33,000,000)</u>
17	Net State DWRP Financing for Authority	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
18	Subtotal - Construction Bond Funds	<u>238,883,000</u>	<u>138,651,000</u>	<u>221,806,000</u>	<u>261,564,000</u>	<u>137,628,000</u>	<u>614,883,000</u>
19	Total Financing Sources Available	359,102,200	276,769,700	375,524,100	419,729,900	299,191,500	941,446,500
Application of Financing Sources							
20	Project Expenditures from I&E Funds	30,000,000	40,000,000	45,000,000	50,000,000	55,000,000	220,000,000
21	Project Expenditures from Construction Funds	<u>100,232,000</u>	<u>104,845,000</u>	<u>148,242,000</u>	<u>123,936,000</u>	<u>54,833,000</u>	<u>532,088,000</u>
22	Total Financing Sources Applied	130,232,000	144,845,000	193,242,000	173,936,000	109,833,000	752,088,000
Financing Sources Available for Future Requirements							
23	Improvement & Extension Fund (g)	90,219,200	98,118,700	108,718,100	108,165,900	106,563,500	106,563,500 (j)
24	Construction Bond Funds (h)	<u>138,651,000</u>	<u>33,806,000</u>	<u>73,564,000</u>	<u>137,628,000</u>	<u>82,795,000</u>	<u>82,795,000</u> (j)
25	Financing Sources Available for Future Req'ts	228,870,200	131,924,700	182,282,100	245,793,900	189,358,500	189,358,500 (j)

(a) From Table 2.

(b) Estimated balance available June 30, 2016 (applies only to Fiscal Year 2017).

(c) The Series 2016 Bonds (for Fiscal Year 2017) and projected additional future bonds.

(d) Amounts required to defease the 2016 Refunded Bonds.

(e) Includes amounts from the Series 2016 Bonds to provide funding to the DWSD CIP for 2017 and 2018. Assumes that no DWSD CIP financing will be required from additional future bonds.

(f) Assumes amounts will be required from future bond proceeds to fund debt service reserve fund.

(g) Line 4 minus Line 20.

(h) Line 15 minus Line 21.

(i) Total column reflects estimated balance available June 30, 2016.

(j) Total column reflects estimated balance available June 30, 2021.

The Authority is in the process of issuing Junior Lien Water Supply System Revenue Bonds through the State Drinking Water Revolving Fund (DWRP) to finance approximately \$33 million of CIP expenditures for local DWSD capital improvements. Loans totaling approximately \$16 million closed in September 2016 and an additional \$17 million are

scheduled to close in March 2017. Proceeds from these loans are reflected on Line 15 of Table 5, and shown to be transferred to the DWSD Construction Fund on Line 16. Again, while the Authority is responsible for the debt service on these Junior Lien Bonds, the annual principal and interest requirements are included in the revenue requirements assigned to the City of Detroit retail customer class. The projections presented in this report do not anticipate any DWRP proceeds to finance Authority capital improvements.

Lines 20 through 22 illustrate the projected application of financing sources to meet the CIP financing requirements stated on Line 1. The balances of funds available for subsequent years is shown on Lines 23 through 25 and are carried forward to Lines 2 and 5 in the next year. The plan to finance the Authority CIP is designed to carry over annual balances in the I&E Fund of approximately \$100 million, and adequate balances in the Authority Construction Fund to facilitate the timing of subsequent bond sales.

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Operational Financing Plan

Table 6 presents a projected plan for the annual operating and capital financing requirements of the Water System for the 2017 through 2021 projection period. The table provides an indication of the adequacy of the Authority's revenues and the feasibility of the future anticipated revenue bond sales and the associated financing plan. This table is designed to indicate the approximate level of annual operating revenues that is projected to be necessary to finance the remaining years of the current CIP and ongoing operating requirements. The overall financial plan summarized by these projections is designed to embrace the Authority's long-term financial stability strategy, which leverages optimization savings, coupled with annual revenue adjustments (equivalent to four percent of the prior year's total revenue budget), to produce increasing amounts of "unrestricted cash" that remains after providing for payment of operation and maintenance expenses, debt service payments, and funding of the various non-operating elements set forth in the foundational documents for the Authority. *See "GLWA Financial Planning Guiding Principles."*

Operating revenue projections, presented in Table 3, are based on the Authority's current water service charge schedule. Projected "Revenues from Adjustments" are presented on Lines 2 through 5, and reflect the increase in annual unit costs necessary to produce a revenue level equal to maximum extent contemplated by the terms of the Lease, which calls for a target 4.0% increase in annual revenue requirements. Due to a projected decline in the revenue base under existing charges, the actual revenue adjustment (or increase in unit costs) required to produce the 4.0% increase in revenue is actually higher than 4.0%. The projected adjustment for the Water System for 2018 also includes an amount necessary to make up the lost revenue from Genesee County as they depart the Regional Water System. The projected revenue adjustments during the projection period are believed to be comparable with those that should be experienced in other areas of the country having water systems of comparable age, and facing similar infrastructure challenges, as the Water System.

Projected non-operating revenues of the Regional Water System include investment earnings from all eligible Water System funds and have been projected based on an analysis of funds on hand, construction schedules, and average fund balances. An annual interest rate of 0.75 percent has been assumed in projecting interest income for all funds.

The Revenue Requirements in this table are presented in a manner that follows the flow of funds set forth in the Master Bond Ordinance. Operation and maintenance expenses are provided for first, followed by debt service separated by the various liens, followed by deposits to the Pension Obligation Payment Fund, the the WRAP Fund, the Budget Stabilization Fund, the Extraordinary Repair and Replacement Reserve Fund, and finally the I&E Fund (including the Lease Payment), as further described below.

The projected operation and maintenance expenses shown on Lines 11 through 15 reflect the total projected transfers to the Operation and Maintenance Funds, including amounts to provide for the operating expense portion of the Pension Obligation reimbursement, as summarized in Table 4.

Table 6
Operational Financing Plan

Line No.	Item	Fiscal Year Ending June 30,				
		2017	2018	2019	2020	2021
		\$	\$	\$	\$	\$
Revenue (a)						
1	Operating Revenue Under Existing Charges	415,256,400	380,925,900	377,828,200	374,797,800	371,829,900
<u>Projected Revenue from Adjustments</u>						
2	FY 2018: 9.0%		34,392,000	34,112,300	33,838,700	33,570,800
3	FY 2019: 4.9%			20,229,000	20,066,800	19,907,900
4	FY 2020: 4.9%				20,880,100	20,714,800
5	FY 2021: 4.9%					21,727,300
6	Total Projected Revenue from Water Charges	415,256,400	415,317,900	432,169,500	449,583,400	467,750,700
7	Miscellaneous Operating Revenue	<u>4,750,000</u>	<u>4,750,000</u>	<u>4,750,000</u>	<u>4,750,000</u>	<u>4,750,000</u>
8	Total Operating Revenue	420,006,400	420,067,900	436,919,500	454,333,400	472,500,700
9	Non-Operating Revenue	<u>2,077,600</u>	<u>2,968,900</u>	<u>3,038,800</u>	<u>3,223,200</u>	<u>3,358,300</u>
10	Total Revenue Available	422,084,000	423,036,800	439,958,300	457,556,600	475,859,000
Revenue Requirements						
11	Transfer to GLWA Regional O&M Account	111,879,400	116,354,500	119,764,100	123,001,800	126,330,300
12	Transfer to DWSD Local O&M Account	33,596,300	34,013,600	34,836,600	35,881,700	36,958,200
13	Transfer to GLWA Pension O&M Account	6,037,100	6,037,100	6,037,100	6,037,100	6,037,100
14	Transfer to DWSD Pension O&M Account	4,262,900	4,262,900	4,262,900	4,262,900	4,262,900
15	Total O&M Expense	155,775,700	160,668,100	164,900,700	169,183,500	173,588,500
<u>Debt Service - Bond and Interest Redemption Deposits</u>						
Senior Lien Bonds						
16	Outstanding Bonds	118,816,100	104,938,700	96,482,100	101,161,100	103,862,600
17	The 2016 GLWA Bonds	15,418,600	22,748,800	22,748,800	22,748,800	22,753,800
18	Future Bonds (lien unspecified)	<u>0</u>	<u>0</u>	<u>7,125,000</u>	<u>19,767,000</u>	<u>25,283,800</u>
19	Total Senior Debt Service	134,234,700	127,687,500	126,355,900	143,676,900	151,900,200
Second Lien Bonds						
20	Outstanding Bonds	23,688,100	20,189,500	26,357,000	27,997,200	29,416,700
21	The 2016 GLWA Bonds	<u>15,301,900</u>	<u>22,663,400</u>	<u>22,663,400</u>	<u>22,663,400</u>	<u>22,668,400</u>
22	Total Second Lien Bonds	<u>38,990,000</u>	<u>42,852,900</u>	<u>49,020,400</u>	<u>50,660,600</u>	<u>52,085,100</u>
23	Subtotal Debt Service	173,224,700	170,540,400	175,376,300	194,337,500	203,985,300
24	SRF Junior Lien Bonds	<u>2,036,400</u>	<u>2,410,700</u>	<u>2,953,300</u>	<u>3,244,100</u>	<u>3,242,600</u>
25	Total Debt Service	175,261,100	172,951,100	178,329,600	197,581,600	207,227,900
26	Non-Operating Portion of Pension Reimb.	9,200,000	9,200,000	9,200,000	9,200,000	9,200,000
27	B & C Note Non-Operating Payments	<u>1,712,700</u>	<u>1,712,700</u>	<u>1,712,800</u>	<u>1,712,800</u>	<u>1,712,800</u>
28	Transfer to Pension Obligation Payment Fund	10,912,700	10,912,700	10,912,800	10,912,800	10,912,800
29	Transfer to WRAP Fund	2,076,300	1,904,600	2,059,700	2,143,500	2,230,100
30	Transfer to Budget Stabilization Fund	360,400	360,500	0	0	0
31	Transfer to Extra. Repair and Repl. Fund	0	733,900	634,900	642,400	660,800
32	Lease Payment - Transfer to Detroit Local I&E	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000
<u>Transfers to I&E Fund to Finance Capital Improvements</u>						
33	Transfer to GLWA Regional I&E Account	52,219,200	47,899,500	55,599,400	49,447,800	53,397,600
34	Transfer to DWSD Local I&E Account	<u>2,978,600</u>	<u>4,008,500</u>	<u>4,168,800</u>	<u>4,335,600</u>	<u>4,509,000</u>
35	Total Transfers to I&E Fund	55,197,800	51,908,000	59,768,200	53,783,400	57,906,600
36	Operating Reserves	0	1,097,900	852,400	809,400	832,200
37	Total Revenue Requirements	422,084,000	423,036,800	439,958,300	457,556,600	475,858,900
38	Indicated Balance (Deficiency)	0	0	0	0	100
Debt Service Coverage Projections						
39	Senior Lien for Rate Covenant Purposes	198%	205%	218%	201%	199%
40	Second Lien for Rate Covenant Purposes	154%	154%	157%	148%	148%
41	SRF Junior Lien for Rate Covenant Purposes	152%	152%	154%	146%	146%
42	Net Revenues (10) - (15)	266,308,300	262,368,700	275,057,600	288,373,100	302,270,500
43	Net Revenues Available after Debt Service (42)-(25)	91,047,200	89,417,600	96,728,000	90,791,500	95,042,600
44	Applied to MBO Reserve Funds (28,29,30,31)	(13,349,400)	(13,911,700)	(13,607,400)	(13,698,700)	(13,803,700)
45	Applied as Lease Payment to DWSD I&E Acct (32)	(22,500,000)	(22,500,000)	(22,500,000)	(22,500,000)	(22,500,000)
46	Applied to Operating Reserves (36)	0	(1,097,900)	(852,400)	(809,400)	(832,200)
47	Available for I&E Fund Accounts (43) - (44,45,46)	55,197,800	51,908,000	59,768,200	53,783,400	57,906,700

(a) From Table 3. Based on application of FY 2017 charges for 2017 through 2021.

(b) From Table 4.

The Authority's projected debt service is depicted on Lines 16 through 25, separated by priorities of lien. The debt service on outstanding bonds reflects the savings provided by the refunding portion of the Series 2016 Bonds. Debt service on senior lien bonds is summarized on Lines 16 through 19, and includes existing debt service on outstanding bonds, net of debt service on the 2016 Refunded Bonds, plus debt service on the "new money" portion of the Series 2016 Bonds, and on future bond sales indicated in Table 5. For purposes of these projections, a scale assuming level debt service based on a 30-year term and an interest rate of 4.75 percent has been assumed on all of these projected bond sales. While no strategic designation as to the lien status of future bonds has been made nor contemplated, for purposes of these projections it is assumed that any additional bonds would be issued as senior lien. A similar presentation of debt service on second lien bonds is presented on Lines 20 through 22. Projected repayments of DWRP Loans are stated on Line 24. These figures reflect repayments of existing loans, including an approximate \$16 million transaction that closed in September 2016 and an additional transaction of approximately \$17 million scheduled to close in March 2017. These transactions are entirely related to improvements to the Detroit Local Water System.

Transfers to the WRAP Fund, shown on Line 29, are established at 0.5% of total projected revenues from service charges. For purposes of these projections, we've assumed that annual amounts deposited into the WRAP Fund will be fully exhausted in the year they are transferred, and therefore these projections do not track WRAP Fund balances or activities.

Transfers to the Budget Stabilization Fund on Line 30 reflect those amounts necessary to establish a balance equivalent to twenty percent of the average annual bad debt expense for the City of Detroit retail customer class for the preceding two fiscal years. The Lease provides that the initial balance in this fund can be achieved over a three-year period. The projections are designed to fully fund the Budget Stabilization Fund (via rates and charges to the Detroit Retail class) by 2018, and to remain at that "fully funded" level thereafter. Actual future funding requirements will be determined by future levels of reported bad debt expense. To the extent that future bad debt expense increases, additional deposits to the Fund will be required. To the extent that future bad debt expense is reduced, the Budget Stabilization Fund balance may be reduced and funds "freed up" for other uses specific to the Detroit retail class.

Transfers to the Extraordinary Repair and Replacement Reserve ("ER&R") Fund are indicated in amounts equal to the lesser of three percent of that year's budgeted operation and maintenance expense (including both the GLWA Regional and DWSD Local operating expenses, but excluding transfers to the Pension O&M subaccounts) or that which is necessary to enable the aggregate value of the fund to equal 15 percent of that year's budgeted operation and maintenance expense. The beginning balance in this fund reflects a fully funded status, and projected transfers shown on Line 31 are those required to maintain this status as budgeted operating expenses increase.

The next revenue requirement relates to the Regional Water System's share of the \$50 million Lease Payment. To the extent that the City of Detroit opts to direct the entire amount of the Lease Payment to finance capital improvements, a \$22.5 million transfer of Authority revenues to the Detroit Local Water I&E Account of the Water System I&E Fund will occur. For

purposes of these projections we have assumed that the City will select to direct the entirety of the Lease Payment to the Detroit Local I&E Account, as shown on Line 32.

Remaining balances are next available for transfer to the Authority Regional and Detroit Local I&E subaccounts of the I&E Fund held within the Trust. The amounts shown on Line 34 for the Detroit Local I&E Account are equal to those indicated in the biennial budget for 2017 and 2018. For purposes of these projections we have assumed annual increases of four percent in the remaining years.

Line 36 of Table 6 presents a revenue requirement established to ensure adequate balances of operating reserves, or working capital. This reserve is established in a similar manner to the Extraordinary Repair and Replacement Reserve Fund and is summarized in detail in Table 7. Annual deposits are targeted to achieve a desired balance expressed in terms of a set amount of days of annual operation and maintenance expense. The June 30, 2016 balance of this reserve was established at a level equivalent to 90 days of annual Authority operation and maintenance expense, including the operating portion of the transfer to the GLWA Pension O&M Account. Projected amounts in 2018 and beyond are anticipated to maintain the total balance at 90 days of annual budgets, as they increase due to inflation.

All remaining revenues are assumed to be transferred to the GLWA Regional I&E Account (as shown on Line 33), and are included in the capital financing plan in Table 5. These projected amounts represent the difference between the total revenue requirements (as established by the overall assumption that the total budgeted revenue requirements will increase 4% annually) and the sum of the other revenue requirements discussed above. For instance, the 2018 revenue requirements are consistent with those contained in the biennial budget and total approximately \$423 million. An increase of 4% results in total 2019 revenue requirements of approximately \$440 million. After providing for all of the projected 2019 revenue requirements (other than the GLWA Regional I&E Account) in the manner delineated above, which total approximately \$392 million, approximately \$48 million remains, which is reflected as the transfer to the GLWA Regional I&E Account on Line 33.

Pursuant to the Rate Covenant of the Master Bond Ordinance, water service charges must be established to maintain debt service coverage ratios of at least 1.20 for Senior Lien Bonds, 1.10 for Second Lien Bonds, and 1.00 for SRF Junior Lien Bonds. The prior DWSD Board had established minimum policy targets that were 0.15 higher for each of these ratios, or at least 1.35 for Senior Lien Bonds, 1.25 for Second Lien Bonds, and 1.15 for SRF Junior Lien Bonds. While the Authority Board has yet to formally establish a new debt service coverage policy, the financial plans presented herein are designed to comply with the prior policy.

Projections of annual debt service coverage levels are summarized on Lines 39 through 41. These coverage levels are calculated on the same basis as required by the rate covenant contained in the Master Bond Ordinance. As indicated, annual coverage levels, assuming the revenue adjustments shown, are projected to be in excess of the amounts required by the Master Bond Ordinance and current policy.

The financial plan presented herein is designed to enhance the System's balance sheet, reverse the erosion in net assets that has occurred in recent years, and improve the Water System's liquidity position. Authority management has embraced this planning strategy, which results in increasing debt service coverage ratios, as indicated in the table.

The projected financial plan presented in this report is based on the assumption that overall annual revenue requirements will continue to be increased 4.0% during this projection period. The savings provided by the refunding portion of the Series 2016 Bonds provide additional flexibility for the Authority to consider alternative operating financial plans that continue to deliver on the overall policy goals.

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Projected Fund Balances

Table 7 presents a summary of the projected cash and investment balances in the System's Operating, Budget Stabilization, ER&R, and I&E Funds. It does not reflect any of the funds that are effectively "exhausted" in the year they are transferred, such as the Debt Service Accounts within the Bond and Interest Redemption Funds, the Pension Obligation Payment Fund, and the WRAP Fund.

Table 7
Projected Cash and Investment Fund Balances

Line No.	Item	<i>Fiscal Year Ending June 30,</i>				
		<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
		\$	\$	\$	\$	\$
	<u>Operating Fund</u>					
1	Beginning Balance	29,500,000	29,500,000	30,597,900	31,450,300	32,259,700
2	Deposit from Operations	0	1,097,900	852,400	809,400	832,200
3	Ending Balance	29,500,000	30,597,900	31,450,300	32,259,700	33,091,900
	<u>Budget Stabilization Fund</u>					
4	Beginning Balance	2,326,900	2,687,300	3,047,800	3,047,800	3,047,800
5	Deposits / (Withdrawals)	360,400	360,500	0	0	0
6	Ending Balance	2,687,300	3,047,800	3,047,800	3,047,800	3,047,800
	<u>ER&R Fund</u>					
7	Beginning Balance	21,821,300	21,821,300	22,555,200	23,190,100	23,832,500
8	Transfers In	0	733,900	634,900	642,400	660,800
9	Ending Balance	21,821,300	22,555,200	23,190,100	23,832,500	24,493,300
	<u>I&E Fund (a)</u>					
10	Beginning Balance	68,000,000	90,219,200	98,118,700	108,718,100	108,165,900
11	Deposits from Revenues (b)	52,219,200	47,899,500	55,599,400	49,447,800	53,397,600
12	Capital Expenditures	(30,000,000)	(40,000,000)	(45,000,000)	(50,000,000)	(55,000,000)
13	Ending Balance	90,219,200	98,118,700	108,718,100	108,165,900	106,563,500
	<u>Total Revenue Generated Funds (c)</u>					
14	Beginning Balance	121,648,200	144,227,800	154,319,600	166,406,300	167,305,900
15	Net Transfers	22,579,600	10,091,800	12,086,700	899,600	(109,400)
16	Ending Balance	144,227,800	154,319,600	166,406,300	167,305,900	167,196,500
	<u>Other Funds</u>					
17	Bond Reserve (excludes Surety)	46,541,200	46,541,200	57,241,200	67,941,200	67,941,200
18	Bond Redemption (Average)	58,420,400	57,650,400	59,443,200	65,860,500	69,076,000
19	Construction Fund	138,651,000	33,806,000	73,564,000	137,628,000	82,795,000
20	Total Funds	387,840,400	292,317,200	356,654,700	438,735,600	387,008,700
21	Subtotal w/o Construction Funds	249,189,400	258,511,200	283,090,700	301,107,600	304,213,700

(a) Only includes GLWA Regional I&E Account

(b) Does not include Lease Payment transferred to DWSD Local I&E Account.

(c) Excludes MBO Funds that are funded and assumed to be fully expended each year, such as the Bond and Interest Redemption Funds, the Pension Obligation Payment Fund, and the WRAP Fund.

The figures on Lines 1 through 16 represent those funds that are entirely generated by revenues, and exclude any amounts funded by bond proceeds. The mechanics of these funds have already been discussed. For planning purposes, operating revenues generated to finance capital improvements are transferred to the I&E Fund and assumed to be not be eligible for capital financing until at least the following year. These funds are technically available to be transferred to a Surplus Fund and to other System funds for any System use.

The Bond Reserve and Construction Fund balances on Lines 17 and 19 are generated via issuance of debt. The Debt Service Accounts of the Bond and Interest Redemption Funds (while funded via revenues) are effectively cleared out as debt service payments are made. The amounts shown on Line 18 of the table reflect the average balances throughout the year. Table 7 illustrates the projected stability in cash and investment balances.

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Compliance with Additional Bonds Test

The "Additional Bonds Test" (the "ABT") of the Master Bond Ordinance governing issuance of the Series 2016 Bonds provides two approaches for certifying eligibility to issue the bonds. For any bonds that are structured to provide new capital financing proceeds, the test requires a net revenues analysis to show coverage of maximum annual future debt service. An alternate test is available for bonds that are issued solely for refunding purposes.

The coverage test portion of the Additional Bonds Test states that the Authority may not issue additional securities to finance system improvements unless the applicable net revenues of the Water System generate sufficient coverage of the maximum future annual principal and interest requirements on the outstanding bonds and on the additional bonds issued. The coverage requirement for each lien of priority includes debt service for the lien in question, plus debt service on all bonds (if any) of all higher lien priorities. Sufficient coverage is defined as being equal to or greater than 120 percent for Senior Lien Bonds, 110 percent for Second Lien Bonds, and 100 percent for all bonds, including Junior Lien Bonds. For purposes of determining the "applicable" net revenues, the Authority may utilize either (a) the historical net revenues for the most recently completed fiscal year for which there is an audit report (so long as the fiscal year has been completed within 16 months of the issuance date of the bonds in question); (b) the current fiscal year; or (c) the immediately succeeding fiscal year. To the extent that a historical year is chosen as the "applicable" year, and to the extent that any changes in rates, fees and charges has been authorized prior to the issuance of the bonds being evaluated, net revenues may be augmented by an amount reflecting the effect of such changes had the Water System's billings during such Fiscal Year been at the increased charges.

Table 8 presents the level of ABT coverage provided for the Series 2016 Bonds. For purposes of the test, we have prepared calculations of "ABT Net Revenues" for each of the three potentially available years defined by the test and described above. We have presented historical, augmented figures for 2015, which will remain eligible for the historical test up until October 31, 2016. These 2015 "ABT Net Revenues" reflect the "modified cash" basis (derived from DWSD's accrual basis "Statement of Changes in Net Position" in the audited financial statements). We have also provided projected figures for 2017, the current fiscal year, and 2018, the succeeding fiscal year. The projected figures are consistent with those presented in Table 6. While the ABT technically only requires compliance with ANY ONE of the applicable years, this table presents capacity under ALL applicable test periods.

The applicable Net Revenues on Line 6 of Table 8 produce the various "allowable" maximum future debt service levels by lien on Lines 7 through 9. The maximum future debt service by lien, after giving effect to the Series 2016 Bonds, is shown on Lines 10 through 12. Dividing the Net Revenues on Line 6 by each of these figures yields Additional Bonds Test Coverage Ratios on Lines 13 through 15. As illustrated in the table, all of these figures exceed the required coverage ratios, and the Additional Bonds Test has been satisfied.

Table 8
Ability of the Water System to Meet the Additional Bonds Test for Issuance of the Bonds

Line No.			(1)	(2)	(3)		
			Historical Test	Prospective Test			
			DWSD	Current Year	Succeeding Year		
			<u>FY 2015</u>	<u>FY 2017</u>	<u>FY 2018</u>		
			\$	\$	\$		
1	Revenues		366,104,300	423,036,800	439,958,300		
2	Operating Expenses		(136,029,800)	(160,668,100)	(164,900,700)		
3	Net Revenues		230,074,500	262,368,700	275,057,600		
4	Augmentation (a)		49,085,200	<i>NA</i>	<i>NA</i>		
5	Augmented Revenues		415,189,500	423,036,800	439,958,300		
6	Augmented Net Revenues		279,159,700	262,368,700	275,057,600		
	<u>Allowable Max Future Debt Service</u>						
7	Senior Lien Bonds	1.20	232,633,100	218,640,600	229,214,700		
8	Senior and 2nd Lien Bonds	1.10	253,781,500	238,517,000	250,052,400		
9	All Bonds, Including SRF Jr Lien	1.00	279,159,700	262,368,700	275,057,600		
	<u>Maximum Future Debt Service</u>						
10	Senior Lien Bonds	in 2017	134,234,700	134,234,700	134,234,700		
11	2nd Lien Bonds	in 2031	179,107,200	179,107,200	179,107,200		
12	SRF Jr Lien Bonds	in 2024	181,543,600	181,543,600	181,543,600		
	<u>Additional Bonds Test Coverage Ratio</u>						
13	Senior Lien Bonds		2.08	1.95	2.05		
14	2nd Lien Bonds		1.56	1.46	1.54		
15	SRF Jr Lien Bonds		1.54	1.45	1.52		
<i>(a) Augmented Revenue Calculation</i>							
		(1)	(2)	(3)	(4)	(5)	(6)
		<i>Reported</i>	<u>Augmentation - % Charge Adjustment</u>			<i>Calculated</i>	<i>Augmented</i>
		<u>Revenue</u>	<u>FY 16 Charges</u>	<u>FY 17 Charges</u>	<u>Combined</u>	<u>Augmentation</u>	<u>Revenue</u>
					(2) & (3)	(1)*(4)	(1) + (5)
	<u>FY 2015</u>	<i>audited</i>					
16	Wholesale Service Revenue	264,930,700	11.3%	3.9%	15.6%	41,421,800	306,352,500
17	Retail Service Revenue	93,221,400	4.8%	3.2%	8.2%	7,663,400	100,884,800
18	Total Revenue from Charges	358,152,100			13.7%	49,085,200	407,237,300

In footnote (a) to the table, we have illustrated the calculation of the augmented revenues for the historical test. The augmentation calculation for the 2015 revenues simply applies the average class “unit cost” increases for the 2016 and 2017 service charges to the audited 2015 revenues.

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OPINIONS

As a result of our investigations and analyses, we have formulated the following opinions:

1. While faced with additional capital expenditures to ensure reliability of service and implement the Master Plan Update, the projected increases in the Authority's wholesale water charges through 2021 are expected to be comparable to what will be experienced in other large wholesale providers.
2. The Authority's organizational documents establish financial planning guiding principles that are designed to ensure responsible financial performance, balancing service requirements and impacts on Customers, and to result in continued improvements in the current financial position of the Water System, including reported debt service coverage and liquidity balances.
3. The Authority's financial plan is sound, supported by gradual revenue adjustments, and is expected to be sufficient to adequately fund the CIP and other programs necessary to meet Water System obligations.
4. The revenues pledged as security for the Series 2016 Bonds are projected to be sufficient to comply with rate covenants required by the Master Bond Ordinance and the targets established by Authority policy.
5. The requirements contained in the Master Bond Ordinance authorizing the issuance of the Series 2016 Bonds have been met, as our calculated Additional Bonds Test coverage ratios exceed the ratios required by Additional Bonds Test.

APPENDIX II
AUDITED FINANCIAL STATEMENTS OF THE WATER FUND OF THE CITY OF DETROIT,
MICHIGAN (AS PREDECESSOR TO GLWA) AS OF AND FOR THE YEAR ENDED
JUNE 30, 2015

APPENDIX III CHARACTERISTICS OF THE WATER SYSTEM SERVICE AREA

Currently, GLWA supplies water to the entire City of Detroit pursuant to a Water and Sewer Services Agreement with the Detroit Water and Sewerage Department (“DWSD”), the entity that provides retail local water services within the City, and to neighboring southeastern Michigan communities throughout Wayne, Oakland, Macomb, St. Clair, Lapeer, Genesee, Washtenaw, and Monroe counties. The 1,079 square-mile water service area, which includes Detroit and 127 suburban communities, makes up approximately 38% of the state’s population.

LARGEST MUNICIPAL ENTITIES SERVED BY THE AUTHORITY

Set forth below are summary descriptions of the largest municipal entities receiving water service from the Authority based upon the 2015 population estimates available from the U.S. Census Bureau and other sources.

City of Detroit

Demographics

The City is located in southeastern Michigan in Wayne County and has a land area of approximately 138 square miles. According to the U.S. Census Bureau, the City is the center of the nation’s 14th largest metropolitan statistical area. As of 2015, the City was the 21th largest city, with an estimated census population of approximately 677,116. The City is internationally known for its automobile manufacturing and trade. The southeastern border of the City lies on the Detroit River, an international waterway, which is linked by the St. Lawrence Seaway to seaports around the world. The City is the commercial capital of Michigan and a major economic and industrial center of the nation. There are eight diverse industrial parks, and three fortune 500 companies have world headquarters within the confines of the City.

Historically, the City’s economy has been closely tied to the manufacturing sector, especially the automotive industry. Two major U.S. automobile companies and FCA US LLC are principal employers and taxpayers in the Detroit metropolitan area. While the City’s economy is linked to automobile and automobile related manufacturing, recent developments are allowing the City to be more diversified by increasing its activities in other manufacturing sectors, technology, health care, trade, commerce and tourism.

The City’s educational and medical institutions continue to grow in size and recognition. Wayne State University, one of the nation’s largest urban educational institutions, as well as the University of Detroit-Mercy, the largest independent university in the State, are located in the City.

In the last several years, the City has seen some positive movement of businesses and residents to the downtown area. Quicken Loans, the largest online mortgage lender, and affiliated companies moved its headquarters into downtown in 2010, and by July 2015 concentrated 5,984 employees in the downtown. Blue Cross Blue Shield has 5,172 employees downtown as of July 2015. In addition, the City has had in excess of \$2.1 billion in development projects in Greater Downtown Detroit since 2010.

Governance

The City is a home rule city with significant independent powers under Act 279 and the City Charter. The City provides the following services: public protection, public works, cultural and recreational, civic center, health, physical and economic development, transportation, retail water supply and sewage disposal, human services (including housing), airport and parking. Commencing in 2013, certain public lighting services within the City are provided by an independent Public Lighting Authority created pursuant to state law. In accordance with the Charter, ordinarily, the City is managed by two branches of government, an executive branch, which is headed by the Mayor, and the legislative branch, which is comprised of the City Council and its agencies. The Mayor and the nine members of the City Council are elected every four years.

The City operates pursuant to the City Charter, subject, as of the Plan Effective Date, to the terms of the Plan of Adjustment, the oversight of the Financial Review Commission, and related legislation requiring the appointment of a chief financial officer for the City, restricting changes in employee and retiree benefits and imposing new requirements on pension management. The City Charter grants the Mayor broad managerial powers including the authority to appoint department directors, deputy directors and other executive officials. The City Council, as the legislative branch, must approve budget appropriations, procurement of goods and services and certain policy matters. The City Charter also provides that the voters of the City reserve the power to enact City ordinances by initiative and to nullify ordinances enacted by the City by referendum. These powers, however, do not extend to the budget or any ordinance for the appropriation of money nor to emergency ordinances.

Southeastern Oakland County Water Authority

The Southeastern Oakland County Water Authority (“SOCWA”) is a municipal corporation created to distribute water to its ten constituent members which include the following municipalities: City of Berkley, Village of Beverly Hills, City of Birmingham, City of Clawson, City of Huntington Woods, City of Lathrup Village, City of Pleasant Ridge, City of Royal Oak, City of Southfield, and the Village of Bingham Farms. SOCWA was established in 1953, and in terms of population is the largest wholesale customer served by the Authority. The area comprising SOCWA covers approximately 56 square miles and is located north of and adjacent to Detroit serving an estimated population of 210,386. Two cities account for roughly two-thirds of the land area and population served by SOCWA: Royal Oak and Southfield. The City of Royal Oak encompasses approximately 11.8 square miles and had an estimated 2015 population of 59,008. It is primarily a residential and commercial community. The City of Southfield covers approximately 26.2 square miles and had an estimated 2015 population of 73,156. Southfield is a residential community with substantial commercial development. SOCWA recently added Bloomfield Hills and Bloomfield Township as non-member customer communities. These communities were formerly direct customers of the Department.

North Oakland County Water Authority

The North Oakland County Water Authority (“NOCWA”) is a municipal corporation created to distribute water to its four constituent members: the City of Auburn Hills, the City of Rochester Hills, the City of Pontiac and Orion Township. NOCWA was established in 2014 and serves an area of approximately 106 square miles. It is located north of Detroit and serves an estimated population of approximately 187,000. These communities were formerly direct wholesale customers.

Warren

The City of Warren became an incorporated city in 1957 and was one of the first large suburban communities to develop in the Detroit metropolitan area. Warren encompasses approximately 34.3 miles of the southwestern section of Macomb County and it is adjacent to Detroit. The estimated 2015 population of Warren was 135,358. Warren's economy is closely linked with the automobile industry, much of it being research and development rather than manufacturing. General Motors Corporation and Chrysler Group LLC have major facilities in Warren.

Genesee County and the City of Flint

The City of Flint is the county seat of Genesee County and is located about 60 miles northwest of Detroit. Flint is the principal city of the Flint MSA. Incorporated in 1855, the City of Flint covers approximately 34.1 square miles and had a 2015 population of 98,310. The U.S. Census Bureau and American Community Survey estimates a Flint area regional population of 410,849. In addition, the survey showed a median household income of \$41,879 and a per capita income of \$22,536.

Sterling Heights

The City of Sterling Heights is located in southwestern Macomb County, about six miles north of Detroit's city limits. Sterling Heights was incorporated in 1968 and covers an area of approximately 36.7 square miles. The estimated 2015 population was 132,052. Industrial development in Sterling Heights continues a trend begun in the City of Warren, immediately to the south of Sterling Heights. The first major industry to locate in Sterling Heights was Ford Motor Company in 1956, followed later by FCA US LLC. In addition, General Dynamics Land System, another major employer, has located its engineering and design headquarters in Sterling Heights. The Detroit News Paper Agency maintains its principal printing plant in Sterling Heights. Lakeside Mall Property LLC, owner of the area's largest shopping mall, is among the ten largest taxpayers in Sterling Heights.

Clinton Township

Clinton Township is located in the central portion of Macomb County, approximately 20 miles northeast of downtown Detroit. It is primarily a residential community with a land area of approximately 38 square miles. Its population grew from 95,648 in 2000 to 96,796 in 2010. The estimated 2015 population is 99,889.

Livonia

The City of Livonia is located in Wayne County, about 13 miles northwest of downtown Detroit. Incorporated in 1950, Livonia is a residential, commercial and industrial city which encompasses some 36 square miles. Livonia's major population growth occurred in the 1950s and 1960s. The estimated 2015 population was 94,635. Livonia's tax base is well diversified. As of 2015, General Motors Corporation and Ford Motor Company comprised approximately 5.3% of its tax base. Three large shopping centers attract shoppers from surrounding communities.

Dearborn

The City of Dearborn adjoins Detroit on the southwest. Its eastern boundary is approximately eight miles from the center of Detroit. Dearborn was incorporated in 1928 and today covers some 24.5 square miles. The location of Ford Motor Company's headquarters in Dearborn in the early 1930s shaped

the economy and growth of that city, and continues to be the largest employer and taxpayer. The estimated 2015 population was 95,171.

Westland

The City of Westland, with an area of 20.5 square miles, is located 16 miles west of downtown Detroit. Land use is primarily residential and commercial in character. Conveniently located near an interstate freeway, industrial development includes auto suppliers, injection molders and tool and die shops. The estimated 2015 population was 82,000.

DETROIT MSA

The Detroit MSA is comprised of six counties: Wayne, Oakland, Macomb, Livingston, Lapeer and St. Clair. The Detroit MSA is ranked the 14th largest metropolitan statistical area in terms of population in the country.

Population

The population in the Detroit MSA grew from 3,169,649 in 1950 to 4,452,557 in 2000. In 2010 the population had shrunk to 4,296,250 and estimates indicate that the population has increased minimally since then, to 4,302,043 in July 2015. The following table presents population trends of the Detroit MSA and the United States since 1990.

Table 1
Population Trends

Year	Detroit-Warren-Livonia MSA		U.S.
	Population	% Change	% Change
1990	4,248,699	(5.3%)	9.8%
2000	4,452,557	4.8%	13.2%
2010	4,296,250	(3.5%)	9.7%
2015	4,302,043	0.1%	4.1%

SOURCE: US. Department of Commerce, Bureau of the Census.

Employment

The Detroit MSA's economy is highly susceptible to swings in the national economy due to its high concentration of employment in the durable goods industries, particularly the automotive industry. Over the past two decades, all three major automotive companies have experienced severe financial problems which have adversely affected the economy of the Detroit area.

The following table sets forth certain information on total employment by industry group for the Detroit MSA and that of the United States. The region has in the past consistently maintained a greater percentage of persons employed in the manufacturing sector than the nation as a whole, which reflected the area's dependence on the automotive industry.

Table 2
Annual Employment by Place of Work (Non-Agricultural)

Detroit-Warren-Livonia MSA								
	2012		2013		2014		2015	
	(000's)	%	(000's)	%	(000's)	%	(000's)	%
Industry Group:								
Natural Resources, Mining, & Construction.....	56	3.1%	58	3.1%	62	3.3%	70	3.6%
Manufacturing.....	219	11.9%	229	12.3%	239	12.6%	240	12.3%
Trade, Transportation & Utilities....	343	18.7%	348	18.7%	354	18.7%	362	18.5%
Information.....	27	1.5%	27	1.4%	28	1.5%	27	1.4%
Financial Activities.....	99	5.4%	102	5.5%	105	5.5%	108	5.6%
Professional and Business Services	347	18.9%	359	19.3%	365	19.2%	392	20.0%
Education and Health Services.....	296	16.1%	297	15.9%	300	15.8%	302	15.4%
Leisure & Hospitality.....	177	9.7%	178	9.5%	183	9.6%	196	10.0%
Other Services.....	76	4.1%	78	4.2%	78	4.1%	76	3.9%
Government.....	<u>193</u>	<u>10.5%</u>	<u>188</u>	<u>10.1%</u>	<u>184</u>	<u>9.7%</u>	<u>184</u>	<u>9.4%</u>
Total.....	<u>1,833</u>	<u>100.0%</u>	<u>1,864</u>	<u>100.0%</u>	<u>1,897</u>	<u>100.0%</u>	<u>1,962</u>	<u>100.0%</u>
U.S.								
	2012		2013		2014		2015	
	(000's)	%	(000's)	%	(000's)	%	(000's)	%
Industry Group:								
Natural Resources & Mining.....	855	0.6%	879	0.6%	928	0.7%	825	0.6%
Construction.....	5,622	4.1%	5,774	4.2%	6,069	4.3%	6,621	4.6%
Manufacturing.....	11,939	8.8%	12,050	8.7%	12,243	8.7%	12,407	8.7%
Trade, Transportation & Utilities....	26,425	19.5%	26,884	19.4%	27,405	19.4%	26,955	18.9%
Information.....	2,685	2.0%	2,682	1.9%	2,698	1.9%	2,755	1.9%
Financial Activities.....	7,846	5.8%	7,911	5.7%	8,035	5.7%	8,168	5.7%
Professional and Business Services	18,237	13.5%	18,906	13.7%	19,636	13.9%	19,797	13.9%
Education and Health Services.....	20,673	15.3%	21,419	15.5%	21,906	15.5%	21,829	15.3%
Leisure & Hospitality.....	13,591	10.0%	14,095	10.2%	14,512	10.3%	15,742	11.0%
Other Services.....	5,448	4.0%	5,461	3.9%	5,519	3.9%	5,687	4.0%
Government.....	<u>22,239</u>	<u>16.4%</u>	<u>22,208</u>	<u>16.1%</u>	<u>22,305</u>	<u>15.8%</u>	<u>21,931</u>	<u>15.4%</u>
Total.....	<u>135,560</u>	<u>100.0%</u>	<u>138,269</u>	<u>100.0%</u>	<u>141,256</u>	<u>100.0%</u>	<u>142,717</u>	<u>100.0%</u>

NOTE: Totals may not add due to rounding.

SOURCE: Michigan Department of Technology, Management and Budget, Labor Market Information; U.S. Department of Labor, Bureau of Labor Statistics.

Unemployment in the Detroit MSA in comparison to the City, the State and the United States is illustrated in the following table:

**Table 3
Civilian Unemployment Rates, 2010 to 2016**

	Detroit	Detroit MSA	State of Michigan	U.S.
2010	23.0%	13.9%	12.7%	9.6%
2011	19.9%	11.6%	10.4%	8.9%
2012	18.0%	10.3%	9.1%	8.1%
2013	16.9%	9.4%	8.8%	7.4%
2014	16.7%	8.5%	7.3%	6.2%
2015	12.4%	6.2%	5.4%	5.1%
2016*	9.8%	5.2%	4.7%	4.7%

SOURCE: Michigan Department of Technology, Management and Budget, Labor Market Information. U.S. Department of Labor, Bureau of Labor Statistics. *As of May 2016.

Housing Characteristics

The following table shows certain housing characteristics of the Detroit MSA in comparison to the State and the United States.

**Table 4
Housing Characteristics - Annual Statistics 2015**

	Detroit MSA	State of Michigan	United States
Homeownership Rates	74.0%	76.6%	63.7%
Rental vacancy	6.8%	7.4%	7.1%
Homeownership Vacancy	1.1%	1.5%	1.8%

SOURCE: U.S. Department of Commerce, Bureau of Census.

Manufacturing

The following table shows a breakdown of manufacturing employment by type for the Detroit MSA from 2011 through 2015.

Table 5
Manufacturing Employment

Industry Group:	2011	2012	2013	2014	2015
	(In Thousands)				
Total durable goods industries.....	170.9	182.9	190.6	198.3	197.5
Total nondurable goods industries.....	<u>34.2</u>	<u>36.3</u>	<u>38.4</u>	<u>40.6</u>	<u>42.4</u>
Total manufacturing employment.....	207.2	219.2	229.0	238.9	239.9

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

Household Income

The following table sets forth certain information concerning median household income in the 25 most populous U.S. metropolitan areas.

Table 6
Median Household Income – 2014

Rank	Metropolitan Area	Median household income (dollars)
1	Washington-Arlington-Alexandria, DC-VA-MD-WV Metro Area	91,756
2	San Francisco-Oakland-Hayward, CA Metro Area	80,008
3	Boston-Cambridge-Newton, MA-NH Metro Area	74,494
4	Baltimore-Columbia-Towson, MD Metro Area	70,311
5	Seattle-Tacoma-Bellevue, WA Metro Area	68,969
6	Minneapolis-St. Paul-Bloomington, MN-WI Metro Area	68,019
7	New York-Newark-Jersey City, NY-NJ-PA Metro Area	66,902
8	Denver-Aurora-Lakewood, CO Metro Area	64,206
9	San Diego-Carlsbad, CA Metro Area	63,996
10	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area	62,169
11	Chicago-Naperville-Elgin, IL-IN-WI Metro Area	61,497
12	Los Angeles-Long Beach-Anaheim, CA Metro Area	60,337
13	Dallas-Fort Worth-Arlington, TX Metro Area	59,175
14	Portland-Vancouver-Hillsboro, OR-WA Metro Area	58,832
15	Houston-The Woodlands-Sugar Land, TX Metro Area	58,689
16	Atlanta-Sandy Springs-Roswell, GA Metro Area	56,618
17	Riverside-San Bernardino-Ontario, CA Metro Area	55,362
18	St. Louis, MO-IL Metro Area	54,959
19	Phoenix-Mesa-Scottsdale, AZ Metro Area	53,310
20	San Antonio-New Braunfels, TX Metro Area	52,786
21	Charlotte-Concord-Gastonia, NC-SC Metro Area	52,591
22	Detroit-Warren-Dearborn, MI Metro Area	52,305
23	Pittsburgh, PA Metro Area	51,883
24	Miami-Fort Lauderdale-West Palm Beach, FL Metro Area	48,435
25	Tampa-St. Petersburg-Clearwater, FL Metro Area	46,706

SOURCE: U.S. Department of Commerce, Bureau of Census.

Detroit/Wayne County Port Authority

The Detroit/Wayne County Port Authority is a public agency responsible for promoting trade and freight transportation through the Port of Detroit, (the “Port”) which provides direct water service to world markets via the Great Lakes/St. Lawrence Seaway. The Port has five privately-owned and operated full-service terminals, a liquid bulk terminal and bulk facility, and a single dock facility with capacity for 14 oceangoing vessels. In addition, more than 30 industries located on the Detroit and Rouge Rivers have their own port facilities. A variety of ship repair services are available. The Detroit area, which is the largest foreign trade zone in the United States, provides financial advantages related to federal taxes and customs duties at subzones throughout the City and region. The Port is a principal port of entry for trade with Canada by means of bridge, vehicular tunnel, rail tunnel and barge service. Steel and scrap steel are the principal export products of the Port, handled for the three local steel mills. General cargo constitutes a minor portion of total tonnage due to the lack of regularly scheduled shipping service.

Transportation Network

Five major rail lines provide direct service to the Detroit area by railroad companies such as Conrail, Norfolk Southern, Grand Trunk Western, Canadian Pacific and CSX Transportation. Major cargo handled by the rail lines in the Detroit area include automobiles, auto parts, steel, chemicals and food products. Air transportation service is provided at the Detroit City Airport, which has general aviation and cargo services, and at the Detroit Metropolitan Wayne County Airport, the nation’s 12th largest airport (by number of aircraft operations) which is the second largest hub and primary Asian gateway for Delta. As of July 2014, the Detroit Metropolitan Wayne County Airport had scheduled passenger service provided by 26 U.S. flag carriers and four foreign flag carriers with more than 32 million annual passenger deplanements and enplanements. This area’s extensive toll-free highway system, which includes the 1-94, 1-75, 1-96 and 1-696 interstate highways and Canadian Highway 401, provides one-day access, based on a 500-mile day, to 48% (by population) of the U.S. market and to the Province of Ontario, Canada.

APPENDIX IV DEFINITIONS

In addition to the terms defined elsewhere in this Official Statement, the following terms shall have the following meanings when used in this Official Statements.

“Accountant” means an independent certified public accountant or a firm of independent certified public accountants having a favorable reputation for skill in performing similar duties to the duties imposed on the Accountant under the Bond Ordinance selected by GLWA Board.

“Act 34” means Public Acts of Michigan, 2001, as amended.

“Additional Bonds” means water supply revenue bonds or water supply revenue refunding bonds of GLWA of equal standing with or subordinate to the DWSD Water Bonds of any Priority of Lien, issued under and in accordance with the Ordinance for the purposes set forth therein.

“Additional Bonds Debt Service Coverage” means, for purposes of issuing Additional Bonds under the Bond Ordinance and for each Priority of Lien, a number equal to Projected Net Revenues in the then current or next succeeding Fiscal Year, or Historical Net Revenues, all as determined by GLWA, divided by Maximum Annual Debt Service for such Priority of Lien and any higher Priority of Lien.

“Applicable Laws” means all laws, rules, regulations, ordinances, permit and license requirements, and orders of courts, governmental officials and agencies of competent jurisdiction with respect to the Leased Water Facilities or which generally relate to the Leased Water Facilities.

“Authority Regional Construction Account” means the account of the Construction Fund for the Regional Water System created pursuant to the Bond Ordinance.

“Authority Regional Improvement and Extension Account” means the account of the Improvement and Extension Fund for the Regional Water System created pursuant to the Bond Ordinance.

“Authority Regional Operation and Maintenance Account” means the account of the Operation and Maintenance Fund created pursuant to the Bond Ordinance.

“Authority Revenue Requirement” means the sum of the projected expenses and revenue requirements for the Regional Water System for each Fiscal Year, including without limitation all of the following: (a) Operation and Maintenance Expenses of the Regional Water System; (b) the amounts necessary to pay the principal of and interest on all Bonds and to restore any reserves therefor established in the Bond Ordinance; (c) the Lease Payment, which shall be a common-to-all charge; (d) the Authority Pension Obligation and the Authority BC Note Obligation; (e) the amount necessary to be deposited to the WRAP Fund, which shall be a common-to-all charge equal to 0.5% of the base budgeted operating Revenues for the Regional Water System for such Fiscal Year; (f) the amounts needed to make the required deposits to the Authority Regional Extraordinary Repair and Replacement Account of the Extraordinary Repair and Replacement Reserve Fund and the Authority Regional Improvement and Extension Account of the Improvement and Extension Fund in the Bond Ordinance; and (g) the amount necessary to satisfy the coverage ratios required by the rate covenant in the Bond Ordinance (collectively, the “Rate Covenant”).

“Authorized Officer” means the Chief Executive Officer, the Chief Financial Officer, or any officer designated by GLWA Board or the designee of any of them.

“Bankruptcy Case” means the City’s Chapter 9 Bankruptcy Case No. 13-53846 in the Bankruptcy Court.

“Bankruptcy Court” means the United States Bankruptcy Court, Eastern District of Michigan, Southern Division.

“Bankruptcy Order” means the Order Pursuant to (I) 11 U.S.C. §§ 105, 364(c), 364(d)(1), 364(e), 902, 904, 921, 922, and 928 (A) Approving Post Petition Financing and (B) Granting Liens and (II) Bankruptcy Rule 9019 Approving Settlement of Confirmation Objections, entered August 25, 2014 in the Bankruptcy Case.

“BC Note Obligation” means, collectively, the debt service on (a) the City of Detroit Financial Recovery Bonds, Series 2014B(1) and Series 2014B(2), dated December 10, 2014, and (b) the City of Detroit Financial Recovery Bonds, Series 2014C, dated December 10, 2014, which bonds were issued to satisfy in whole or in part claims relating to the City’s pension obligation certificates and post-retirement health benefits.

“Bond” or “Bonds” means, regardless of Priority of Lien, any DWSD Water Bond, established and created by the City and outstanding under Ordinance No. 01-05 and any Series of Additional Bonds established and created by GLWA under the Bond Ordinance and issued pursuant to a Series Ordinance, and Reimbursement Obligations and Junior Lien Reimbursement Obligations of any Priority of Lien established and created under Ordinance No. 01-05 or by a Series Ordinance.

“Bond Counsel” means a firm of nationally recognized bond counsel acceptable to GLWA.

“Bond Fund” means, collectively, the Bond Interest and Redemption Funds created pursuant to the Bond Ordinance.

“Bond Interest and Redemption Fund” means each fund for the payment of Debt Service for each Series of Bonds of the same Priority of Lien.

“Bond Ordinance” means Master Bond Ordinance No. 2015-01 adopted by the GLWA Board on October 7, 2015, as from time to time restated, amended or supplemented by Supplemental Ordinances in accordance with the terms and provisions thereof.

“Bond Payment Date” means any of the dates specified in a Series Ordinance for payment of interest, or interest and principal on the Bonds.

“Bond Reserve Account” means collectively, the Senior Lien Bond Reserve Account and the Second Lien Bond Reserve Account Fund created pursuant to the Bond Ordinance.

“Bondholder” or “Holder” or any similar term means any person or party who shall be the registered owner of any Bond.

“Budget Stabilization Fund” means the fund created pursuant to the Bond Ordinance.

“Budget Stabilization Requirement” means with respect to the Local Water System, an amount calculated each Fiscal Year equal to (A) two times a number equal to twenty percent of the average bad debt expense of Retail Water Customers as a class for the two preceding Fiscal Years based on audited financial statements (or unaudited statements if audited statements are not available), which amount shall be funded from Retail Revenues initially in thirds over three Fiscal Years beginning in Fiscal Year 2016,

or (B) such other amount specified by GLWA Board by supermajority (5/6) vote. For purposes of the required deposit for Fiscal Year 2016 the amount shall be \$2,327,026 for the Local Water System.

“Business Day” means a day other than (i) Saturday, Sunday or a legal holiday, (ii) a day on which the Trustee is authorized or required to remain closed, (iii) a day on which the New York Stock Exchange is closed or (iv) a day on which the Federal Reserve is closed.

“Capital Improvement Program” means the ongoing program of capital improvements for the Leased Water Facilities, as the same may be modified from time to time by GLWA.

“CIPs” means, collectively, the Capital Improvement Program and the Detroit Capital Improvement Program.

“Chief Executive Officer” means the Chief Executive Officer of GLWA.

“Chief Financial Officer” means the Chief Executive Officer of GLWA.

“Common-to-all” means the method or methods for allocating to wholesale customers of the Regional Water System and Retail Water Customers the cost of water service provided by the Regional Water System that benefits both wholesale customers and Retail Water Customers, which allocation is determined on a case by case analysis of the benefits derived from each customer class from such service.

“Code” means the Internal Revenue Code of 1986, as amended, and the regulations, rulings and court decisions thereunder, as the context may require.

“Construction Fund” means the fund created pursuant to the Bond Ordinance.

“Credit Entity” means, with respect to a Series of Bonds or a maturity of such Series, a commercial bank, a bond insurance company, any other financial institution or combination of such financial institutions or governmental entity which issues a Credit Facility for such Series of Bonds or maturities but only while such Credit Facility is outstanding or Reimbursement Obligations or Junior Lien Reimbursement Obligations or other amounts are outstanding under any written agreement with a Credit Entity pursuant to which a Credit Facility is issued.

“Credit Facility” means one or more credit facilities with respect to a Series of Bonds or maturity of such Series consisting of an irrevocable and unconditional letter of credit, line of credit, standby bond purchase agreement, municipal bond insurance policy, surety bond, liquidity facility, or other credit enhancement facility or other liquidity facility issued by a Credit Entity as described in the Bond Ordinance to provide moneys for the purpose of paying the principal (whether upon tender or upon maturity or redemption) of and the interest on such Series of Bonds, but only while such Credit Facility is outstanding.

“Debt Service” means with respect to Bonds of each Priority of Lien, the amount scheduled to become due and payable annually on all Outstanding Bonds as (i) interest, exclusive of interest capitalized on such Outstanding Bonds and paid from the proceeds of a Series of Bonds or investment earnings on such capitalized interest, plus (ii) principal, plus (iii) Mandatory Redemption Requirements. For purposes of calculating Debt Service:

- (i) All principal payments shall be deemed to be made as and when the same shall become due or upon mandatory redemption;

(ii) Outstanding Variable Rate Bonds shall be deemed to bear interest during any period after the date of calculation at a fixed annual rate equal to the weighted average of the actual rates on such Variable Rate Bonds for each day during the 365 consecutive days (or any lesser period such Variable Rate Bonds have been Outstanding) ending on the last day of the month next preceding the date of calculation, or at the effective fixed annual rate thereon as a result of a Swap Agreement with respect thereto; provided, that such effective fixed annual rate for Variable Rate Bonds subject to a Swap Agreement must be utilized as long as such Swap Agreement is contracted to remain in full force and effect, and provided further, that for purposes of establishing compliance with the requirements of issuing Additional Bonds under the Bond Ordinance, Outstanding Variable Rate Bonds shall be deemed to bear interest as provided for Variable Rate Bonds proposed to be issued in clause (iii) below;

(iii) Variable Rate Bonds proposed to be issued shall be deemed to bear interest at a fixed annual rate equal to the average of the interest rates published in The Bond Buyer Revenue Bond Index during the twelve (12) months preceding the date of issuance of such Variable Rate Bonds, or at the effective fixed annual rate thereon as a result of a Swap Agreement with respect to such Variable Rate Bonds; and provided, that such effective fixed annual rate must be utilized only so long as such Swap Agreement is contracted to remain in full force and effect;

(iv) Any computation of Debt Service shall recognize and give effect to the alternative, rather than the cumulative, nature of obligations on Bonds, including any related Reimbursement Obligations or Junior Lien Reimbursement Obligations to a provider of credit enhancement or a liquidity facility securing payment of such Bonds. The portion of any termination payment constituting regularly scheduled debt service which becomes payable pursuant to the terms of a Swap Agreement shall constitute interest as provided in Act 34.

“Debt Service Installment Requirement” means, as of the first day of the month with respect to each Priority of Lien of Outstanding Bonds, the amounts calculated as described below. For interest payments due on Bonds of such Priority of Lien semiannually, the amount set aside and transferred to the Bond Fund each month for interest on such Bonds shall be 1/6 of the total amount of interest on such Bonds next coming due or such lesser amount as is necessary to assure that the amount set aside in the Bond Fund as of the first day of such month is not less than the product of (a) 1/6 of the amount of interest next due on such Bonds times (b) the number of months elapsed since and including the last interest payment date. For Series of Bonds of such Priority of Lien with more frequent interest payment dates, the amounts set aside each month shall equal one month’s accrued interest on such Bonds as provided in the Series Ordinance for such Bonds. For the month immediately prior to each Bond Payment Date the amount set aside and transferred to the Bond Fund to pay interest shall be reduced by investment earnings in the Bond Fund which are available for such purpose and shall be increased by the amount, if any, necessary so that the amount on deposit is sufficient to pay the interest due on such Bond Payment Date. The amount set aside and transferred to the Bond Fund each month for principal on the Bonds of such Priority of Lien shall be 1/12 of the amount of principal next coming due by maturity or as a Mandatory Redemption Requirement or such lesser amount as is necessary to assure that the amount set aside in the Bond Fund as of the first day of such month is not less than the product of (a) 1/12 of the amount of principal next due on such Bonds times (b) the number of months elapsed since and including the last principal payment date. If there is any deficiency in the amount previously set aside, that deficiency shall be added to the next succeeding month’s requirement. For the month immediately prior to each Bond Payment Date, the amount set aside and transferred to the Bond Fund to pay principal shall be reduced by investment earnings in the Bond Fund which are available for such purpose and shall be increased by the amount, if any, necessary so that the amount on deposit is sufficient to pay the principal due on such Bond Payment Date. For all purposes of the Bond Ordinance and the Bonds of such Priority of Lien, Term Bonds of such Priority of Lien shall be deemed to come due at the time and in the amounts

of the Mandatory Redemption Requirements therefor and the principal amount due on such Term Bonds on the dates of their stated maturities shall be reduced by the Mandatory Redemption Requirements therefor coming due prior to the stated maturities for such Term Bonds. Mandatory Redemption Requirements for Term Bonds may be satisfied by the call of Bonds of such Priority of Lien of the same maturity in principal amount of the Mandatory Redemption Requirement at par and accrued interest or the purchase and surrender to the Trustee of Bonds of the same maturity in the principal amount of the Mandatory Redemption Requirement from moneys in the Bond Fund, or purchased with other funds legally available therefor, all as specified in a Series Ordinance.

“Detroit Capital Improvement Program” means the ongoing program of capital improvements for the Detroit Local Water Facilities, as the same may be modified from time to time by the City.

“Detroit Local Construction Account” means the account of the Construction Fund for the Local Water System created pursuant to the Bond Ordinance.

“Detroit Local Improvement and Extension Account” means the account of the Improvement and Extension Fund for the Local Water System created pursuant to the Bond Ordinance.

“Detroit Local Operation and Maintenance Account” means the account of the Operation and Maintenance Fund for the Local Water System created pursuant to the Bond Ordinance.

“Detroit Local Sewer Facilities” means those sewage disposal facilities, other than the Leased Sewer Facilities, that are used to provide sewer service directly to Retail Sewer Customers on the Effective Date, all as more fully described in the Water and Sewer Services Agreement and the Sewer Lease.

“Detroit Local Water Facilities” means those Water System facilities, other than the Leased Water Facilities, that are used to provide water service directly to Retail Water Customers on the Effective Date, including fire hydrants, all as more fully described in the Water and Sewer Services Agreement and the Lease.

“DWSD-R” means the Detroit Water and Sewerage Department, as in existence on and after the Effective Date.

“DWSD Water Bonds” means all bonds and other indebtedness of the City secured by a pledge of and a statutory lien on the Net Revenues of the Water System and Outstanding immediately prior to the Effective Date, as more fully described in Schedule B to the Lease.

“Event of Default” means an Event of Default as such term is defined in the Bond Ordinance.

“Extraordinary Repair and Replacement Maximum Requirement” means, for any Fiscal Year, 15% of the budgeted Operation and Maintenance Expenses of the Regional Water System and the Local Water System for such Fiscal Year, less any amount that is withdrawn in the Fiscal Year from the Extraordinary Repair and Replacement Reserve Fund for paying a major unanticipated repair or replacement to the Regional Water System or the Local Water System pursuant to the Bond Ordinance, but only in the Fiscal Year that such amount is withdrawn.

“Extraordinary Repair and Replacement Minimum Requirement” means, for any Fiscal Year, 1/12 of 3% of the budgeted Operation and Maintenance Expenses of the Regional Water System and the Local Water System for such Fiscal Year plus such amount as is necessary to restore to the Extraordinary Repair and Replacement Reserve Fund any amount credited to the Improvement and Extension Fund.

“Extraordinary Repair and Replacement Reserve Fund” means the fund created pursuant to the Bond Ordinance.

“Fiscal Year” means the fiscal year and operating year of GLWA which begins on July 1 and ends on the following June 30, as it may be modified.

“Government Obligations” means direct obligations of the United States, its agencies, or, or United States government sponsored enterprises or obligations the payment of principal and interest on which is fully and unconditionally guaranteed by the United States, or its agencies.

“GRS” means the General Retirement System of the City.

“GRS Plan” means the frozen defined benefit plan of the GRS in effect on December 10, 2014, the effective date of the Plan of Adjustment.

“Historical Net Revenues” means, for purposes of issuing Additional Bonds under the Bond Ordinance, (a) the Net Revenues of the Water System for either (i) the immediately preceding Fiscal Year for which audited financial statements of GLWA are available, and if not, the audited financial statements of DWSD for such Fiscal Year may be used, or (ii) any audited Fiscal Year ending not more than sixteen months prior to the date of delivery of the Additional Bonds then being issued pursuant to the Bond Ordinance, as determined by GLWA, plus, at the option of GLWA, (b) an amount determined by GLWA in accordance with the Bond Ordinance to equal the effect of any change in the rates, fees and charges of the Regional Water System and the Local Water System authorized at or prior to the date of sale of the Additional Bonds then being issued pursuant to the Bond Ordinance, as if the Water System’s billings during such Fiscal Year had been at the increased rates, plus, at the option of GLWA, (c) an amount determined by GLWA in accordance with the Bond Ordinance to equal one hundred percent of the estimated increase in Net Revenues projected to accrue as a result of (i) the acquisition of the repairs, extensions, enlargements and improvements to the Water System projected to be paid in whole or in part from the proceeds of the Additional Bonds then being issued pursuant to the Bond Ordinance and (ii) any acquisition, extension or connection which was made subsequent to the end of such Fiscal Year. For purposes of determining Historical Net Revenues, if the first Fiscal Year of such determination is comprised of less than 12 months, then Historical Net Revenues for the complete Fiscal Year shall be the combined Net Revenues of (i) DWSD’s partial fiscal year and (ii) GLWA’s partial Fiscal Year and shall be used with adjustments to assure no duplication of Revenues in the calculation.

“Improvement and Extension Fund” means the fund used for improvements, enlargements, extensions or betterment of the Water System, created pursuant to the Bond Ordinance.

“Insurance Consultant” means an independent person or a firm of persons having skill and experience in dealing with the insurance requirements of municipal Water Systems comparable in size and function to the Water System.

“Issuance Costs” means items of expense payable or reimbursable directly or indirectly by or to GLWA and related to the authorization, sale and issuance of Bonds and authorization of the Bond Ordinance, which items of expense shall include, but not be limited to, application fees and expenses, publication costs, printing costs, costs of reproducing documents, filing and recording fees, Bond Counsel, financial and other consultants’ fees, initial Trustee’s fees, costs and expenses, underwriters’ fees and discount, costs of credit ratings, costs of Credit Facilities and charges for execution, transportation and safekeeping of the Bonds and related documents, and other costs, charges and fees in connection with the foregoing.

“Junior Lien Bond Fund” means the fund created pursuant to the Bond Ordinance.

“Junior Lien Bonds” means any Bonds or Series of Bonds, including Second Lien Bonds and SRF Junior Lien Bonds, issued by the City under of Ordinance No. 01-05 and Second Lien Bonds, SRF Junior Lien Bonds, Pension Junior Lien Bonds and any Additional Bonds of a Priority of Lien subordinate thereto issued by GLWA under the Bond Ordinance and pursuant to a Series Ordinance and payable from Net Revenues deposited in the Junior Lien Bond Fund after satisfaction of requirements for funding the Senior Lien Bond Fund, and Junior Lien Reimbursement Obligations established and created by a Series Ordinance.

“Junior Lien Reimbursement Obligations” means any obligations to repay a Credit Entity for payments of Debt Service made with respect to a Series of Junior Lien Bonds, as provided in any written agreement between GLWA and a Credit Entity pursuant to which a Credit Facility is issued, which Junior Lien Reimbursement Obligations may be evidenced by Refunding Bonds or Junior Lien Bonds or contractual undertakings with the Credit Entity; provided, that for purposes of determining Debt Service, reimbursement of expenses, fees and other similar contractual undertakings shall not be included.

“Lease” means the Regional Water System Lease dated June 12, 2015, between the City, as lessor, and GLWA, as lessee, of the Leased Water Facilities, as amended from time to time.

“Lease Payment” means the annual payment required to be made by GLWA for the benefit of the City pursuant to the Lease, in consideration for the leasing of the Leased Water Facilities to GLWA and the absolute and irrevocable assignment and transfer to GLWA of the Revenues as provided in the Lease and to be applied by GLWA as provided herein.

“Leased Sewer Facilities” means, collectively, all of the City’s right, title and interest in and to that portion of the real and tangible personal property comprising a part of the Regional Sewer System and owned by the City and providing sewer service to the wholesale customers of the Regional Sewer System and Retail Sewer Customers up to the point of connection to the Detroit Local Sewer Facilities, all as more fully set forth in the Sewer Lease.

“Leased Water Facilities” means, collectively, all of the City’s right, title and interest in and to that portion of the real and tangible personal property comprising a part of the Water System and owned by the City and providing water service to both the wholesale customers of the Regional Water System and Retail Water Customers up to the point of connection to the Detroit Local Water Facilities, including without limitation, the land, buildings, water intakes, pump stations, storage facilities, other structures fixtures (including meters and transmission mains), and improvements and real property interests such as easements, access rights, rights of way, permits and leases, all as more fully set forth in Schedule A attached to the Lease (the “Real Property”), and any and all tangible personal property such as machinery, equipment, pumps, tanks, storage facilities, pipes, pipelines, transmission lines, vehicles, furniture, office equipment and inventory, including without limitation the personal property that is described in Schedule A attached to the Lease (the “Personal Property”). Leased Water Facilities include all improvements and additions to and replacements of the foregoing described Real Property and Personal Property, but do not include the Detroit Local Water Facilities.

“Local Sewer System” means that portion of the Sewer System that provides sewer service directly to Retail Sewer Customers, which on the Effective Date consists of the Detroit Local Sewer Facilities.

“Local Water System” means that portion of the Water System that provides water service directly to the Retail Water Customers, which on the Effective Date consists of the Detroit Local Water Facilities.

“Mandatory Redemption Requirement” means as to each Series of Bonds for any year, the principal amount of Bonds of such Series subject to mandatory sinking fund redemption in such year, as provided in the Series Ordinance or Sale Resolution for such Series of Bonds.

“Maximum Annual Debt Service” means, with respect to any given Priority of Lien, the maximum aggregate Debt Service Installment Requirements in any future Fiscal Year on Outstanding Bonds of such Priority of Lien and any Additional Bonds then being issued in accordance with the Bond Ordinance. If any Additional Bonds (any of such, the “Refunding Bonds”) are to be issued to refund Outstanding Bonds (the “Bonds to be Refunded”), the Debt Service Installment Requirements to be used for determining Maximum Annual Debt Service shall include the Debt Service Installment Requirements with respect to the Refunding Bonds and not the Debt Service Installment Requirements with respect to the Bonds to be Refunded.

“Net Proceeds” means in the event of the destruction or taking of any portion of the Leased Water Facilities or the Detroit Local Water Facilities, the gross proceeds derived by GLWA or the City, as the case may be, from insurance on or condemnation of the Leased Water Facilities or the Detroit Local Water Facilities, respectively, less payment of attorneys’ fees, if any, and other expenses properly incurred in the collection thereof.

“Net Revenues” means for any period of time, all Revenues received during such period of time, except for those Revenues transferred to the Operation and Maintenance Fund.

“Operation and Maintenance Expenses” means the reasonable expenses of administration, operation and maintenance of the Regional Water System or the Local Water System, as the case may be, but shall not include the Required Annual GRS Payment.

“Operation and Maintenance Fund” means the Operation and Maintenance Fund established under the Bond Ordinance. As further provided in the Bond Ordinance, such Fund shall not be part of the Trust Estate held for the benefit of Holders, who shall have no interest in such Fund whatsoever, and any funds on deposit in or credited to such Fund are not and shall not be Pledged Assets.

“Ordinance” means the Bond Ordinance, and shall include the Series Ordinance and Sale Resolution (if any) or Sale Order (if any) of the Chief Executive Officer or other Authorized Officer, for each Series of Bonds.

“Ordinance No. 01-05” means Ordinance No. 01-05 of the City, adopted by the City Council of the City on January 26, 2005, and which amended and restated Ordinance No. 30-02 of the City related to the Water System.

“Outstanding” means, as of any date and unless otherwise provided in a Series Ordinance, all Bonds which have been authenticated and delivered by the Trustee under Ordinance No. 01-05 and the Bond Ordinance (including tendered Bonds which may be owned by GLWA, from time to time, prior to the remarketing thereof), except:

- (i) Bonds (or portions of Bonds) for the payment or redemption of which there shall be held in trust by the Trustee under the Bond Ordinance (whether at or prior to maturity or redemption) (a) moneys equal to the principal amount or Redemption Price thereof, as the case

may be, with interest to the date of maturity or redemption or (b) Sufficient Government Obligations in such principal amounts, having such maturities and bearing such interest, as together with the moneys described in clause (a), if any, shall be sufficient without reinvestment to pay when due the principal amount or Redemption Price, as the case may be, with interest due to the date of maturity or redemption; provided, that if such Bonds are to be redeemed, notice of such redemption shall have been given as provided in Article III or provisions satisfactory to the Trustee shall have been made for giving of such notice:

(ii) Bonds in lieu of or substitution for which other Bonds shall have been authenticated and delivered pursuant to the Bond Ordinance;

(iii) Bonds deemed to have been paid or defeased as provided under the Bond Ordinance; and

(iv) Bonds subject to a mandatory tender which have not been tendered prior to the related tender date which are deemed to have been redeemed.

“Pension Junior Lien Bonds” means Bonds, if any, issued to pay all or any part of the Required Annual GRS Payment, which may only be issued as Junior Lien Bonds with a Priority of Lien subordinate to SRF Junior Lien Bonds.

“Pension Obligation” means the amounts allocable to the Water System and required to be paid over time by DWSD and as provided in the Lease, GLWA, in respect of (i) the GRS Plan as provided in the Plan of Adjustment and the Bankruptcy Order and (ii) the BC Note Obligation as provided in the Plan of Adjustment.

“Pension Obligation Payment Fund” means the Pension Obligation Payment Fund established under the Bond Ordinance.

“Permitted Investment” means with respect to any particular amounts, an investment permitted by Act 94, including Government Obligations, and subject to such limitations as imposed under the Bond Ordinance or a Series Ordinance for the investment of such amounts.

“Person” means any natural person, firm, partnership, entity or public body.

“Plan of Adjustment” means the Eighth Amended Plan for the Adjustment of Debts of the City of Detroit, in the Bankruptcy Case, as confirmed by order of the Bankruptcy Court entered on November 12, 2014 and effective on December 10, 2014.

“Pledged Assets” means:

(i) Net Revenues;

(ii) the funds and accounts established by or pursuant to the Bond Ordinance except for the Operation and Maintenance Fund, the Construction Fund and the Rebate Fund and any account of any such fund; and

(iii) investments of amounts or any income or gain realized therefrom credited to any fund, account or subaccount that is a Pledged Asset.

“Priority of Lien” means, with respect to any particular Bonds, all other Bonds having a lien on Pledged Assets on parity with such Bonds.

“Projected Net Revenues” means, the Net Revenues of the Water System for any given Fiscal Year, which may include (a) one hundred percent of the estimated increase in Net Revenues projected to result from approved rate increases and (b) in the case of issuing Additional Bonds, for the purpose of determining the Additional Bonds Debt Service Coverage, one hundred percent of the estimated increase in Net Revenues projected to accrue as a result of the acquisition of the repairs, extensions, enlargements and improvements to the Water System projected to be paid for in whole or in part from the proceeds of the Additional Bonds.

“Prudent Utility Practices” means those practices, methods, techniques, standards and acts engaged in or approved by a significant portion of the regulated water utility industry in the United States or any of the practices, methods, techniques, standards and acts which, in the exercise of reasonable judgment in light of the facts known (or which a qualified and prudent operator could reasonably be expected to have known) at the time a decision is made, would have been expected to accomplish a desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition, in each case related to the operation, maintenance and improvement of similar systems at utility facilities of the same or similar size and type as the Leased Water Facilities.

“Rate Covenant Debt Service Coverage” means, for purposes of the rate covenant in the Bond Ordinance and for each Priority of Lien, a number equal to Projected Net Revenues for the Fiscal Year of calculation divided by the aggregate Debt Service Installment Requirements on Bonds for such Fiscal Year, net of funds on hand representing capitalized interest, all for such Priority of Lien and any higher Priority of Lien.

“Rating Agency” means any nationally recognized rating service then rating any of the Bonds.

“Rebate Fund” means the Rebate Fund created pursuant to the Bond Ordinance.

“Receiving Fund” means the Fund required to be established and maintained by GLWA under the Bond Ordinance to which all Revenues of the Water System are to be credited and applied as provided in the Bond Ordinance.

“Redemption Price” means the principal of any Bond which has been called for redemption, together with any premium thereon.

“Refunding Bonds” means any Additional Bonds issued to refund Outstanding Bonds pursuant to the Bond Ordinance.

“Regional Sewer System” means that portion of the Sewer System that provides sewer service to the wholesale customers thereof and Retail Sewer Customers up to the point of connection to the Local Sewer System, which on the Effective Date consists of the Leased Sewer Facilities.

“Regional Water System” means that portion of the Water System that provides water service to the wholesale customers thereof and Retail Customers up to the point of connection to the Local Water System, which on the Effective Date consists of the Leased Water Facilities.

“Reimbursement Obligations” means any obligations to repay a Credit Entity for payments of Debt Service made with respect to a Series of Senior Lien Bonds as provided in any written agreement between GLWA (as successor to the City or otherwise) and a Credit Entity pursuant to which a Credit

Facility is issued, which Reimbursement Obligations may be evidenced by the Senior Lien Bonds of such Series, Refunding Bonds or contractual undertakings with the Credit Entity; provided, that for purposes of determining Debt Service, reimbursement of expenses, fees and other similar contractual undertakings shall not be included.

“Required Annual GRS Payment” means the amount determined as specified in “SUMMARY OF CERTAIN PROVISIONS OF THE BOND ORDINANCE – Certain Other Funds – The Pension Obligation Payment Fund” herein.

“Required Coverage” means (a) for Senior Lien Bonds, 1.20, (b) for Second Lien Bonds, 1.10, and (c) for any Junior Lien Bonds other than Second Lien Bonds, 1.00.

“Reserve Requirement” means, except as otherwise provided with respect to a particular Series of Bonds in the applicable Series Ordinance pursuant to the Bond Ordinance, an amount equal to the Maximum Annual Debt Service requirements for each Series of Outstanding Senior Lien Bonds, which amount is required to be on deposit or, if permitted by law, otherwise provided for (including, but not limited to, through provision of a letter of credit, surety bond or insurance policy in the same amount and with a credit rating at the time of issuance of such Series of Bonds not less than the credit rating on such Series of Bonds) in the Senior Lien Bond Reserve Account; provided, however, that such requirement may be satisfied by a deposit of Bond proceeds at the time of issuance of a Series of Senior Lien Bonds, or by an accumulation on a scheduled basis of investment earnings or other deposits which will result in an amount equal to the Reserve Requirement for such Series of Bonds being on deposit no later than the date of the last scheduled application of all capitalized interest for such Series; provided, further, that with respect to a Series of Senior Lien Bonds which are proposed to be issued as Variable Rate Bonds, the Reserve Requirement shall be calculated utilizing the assumptions set forth under subparagraph (iii) of the definition of Debt Service; and provided that in no event shall the Reserve Requirement exceed the maximum permitted by the Code. Any Reserve Requirement with respect to one or more Series of Junior Lien Bonds shall be established by the related Series Ordinance, and if no amount is established therein, the Reserve Requirement shall be based on the Maximum Annual Debt Service requirement.

“Retail Customers” means, collectively, the Retail Water Customers and the Retail Sewer Customers.

“Retail Revenues” means Revenues collected from Retail Customers.

“Retail Sewer Customers” means those individual customers located within and outside the City that receive sewer service directly from the Detroit Local Sewer Facilities.

“Retail Water Customers” means those individual customers located within and outside the City that receive water service directly from the Detroit Local Water Facilities.

“Revenue Receipts Fund” means the Revenue Receipts Fund created pursuant to the Bond Ordinance and under GLWA’s Regional Sewer System Master Bond Ordinance and held in trust by the Trustee.

“Revenues” means the revenues, including the Retail Revenues, of GLWA from the Water System, which shall be construed as defined in Section 3 of Act 94, and shall also include:

- (i) amounts received from a Swap Provider under a Swap Agreement, including any amounts payable upon termination thereof;

(ii) income earned and gain realized from the investment of amounts in the various funds, accounts and subaccounts established by the Bond Ordinance other than the Construction Fund for any Fiscal Year in which earnings on the Construction Fund are not credited to the Receiving Fund; and

(iii) all moneys collected directly or indirectly by GLWA or by the City, as agent of GLWA, under the Water and Sewer Services Agreement, and deposited or to be deposited into the Receiving Fund under the Bond Ordinance.

“Sale Resolution” or “Sale Order” means a resolution or resolutions of GLWA adopted by GLWA Board in accordance with the Bond Ordinance or an Order of the Chief Executive Officer, Chief Financial Officer or other specified Authority official authorizing the sale of a Series of Bonds in accordance with the terms and provisions of the Bond Ordinance and a Series Ordinance.

“Second Lien Bonds” means the DWSD Water Bonds having a second lien on the Net Revenues of the Water System that are being assumed by GLWA and any Additional Bonds of equal Priority of Lien.

“Senior Lien Bonds” means the DWSD Water Bonds having a first and senior lien on the Net Revenues of the Water System that are being assumed by GLWA, and any Additional Bonds of equal Priority of Lien.

“Series” means a Series of Bonds issued and sold pursuant to a Series Ordinance and the Bond Ordinance or Ordinance No. 01-05.

“Series Ordinance” means an ordinance or ordinances, including, if necessary, a Sale Resolution or Sale Order, authorizing the issuance and sale of a Series of Bonds in accordance with the provisions of the Bond Ordinance.

“Sewer Lease” means the Regional Sewage Disposal System Lease, to be effective on the Effective Date, relating to the lease of the Leased Sewer Facilities from the City to GLWA.

“Sewer Lease Payment” means the annual payment required to be made by GLWA for the benefit of the City pursuant to the Sewer Lease in consideration for the leasing of the Leased Sewer Facilities to GLWA as provided therein.

“Sewer System” means, the City’s sewage disposal system as existing immediately prior to the Effective Date, which consists on the Effective Date of the Regional Sewer System and the Local Sewer System as the same may be improved from time to time.

“Shared Services Agreement” means the Shared Services Agreement between the City and GLWA relating to the provision of services by the City to GLWA with respect to the Regional Water System and the Regional Sewer System, and the provision of services by GLWA to the City with respect to the operation and management of the Detroit Local Water Facilities and the Detroit Local Sewer Facilities, as it may be amended and supplemented as provided therein.

“SRF” means the State Drinking Water Revolving Fund financing program.

“SRF Junior Lien Bonds” means all SRF Junior Lien Bonds being assumed by GLWA and any Additional Bonds of equal Priority of Lien issued for the purpose of providing improvements to the Water System under the SRF and shall be the second Priority of Lien of Junior Lien Bonds.

“State” means the State of Michigan.

“Sufficient Government Obligations” means (a) direct obligations of the United States of America or (b) obligations the principal of and interest on which are fully guaranteed by the United States of America, and which (i) are not redeemable at the option of the issuer and (ii) without reinvestment of the interest, come due at such times and in such amounts as to be fully sufficient to pay the principal or Redemption Price and interest, respectively, as each becomes due on the Bonds.

“Supplemental Ordinance” means a Series Ordinance or other Ordinance supplemental to the Bond Ordinance and authorized pursuant to the Bond Ordinance.

“Surplus Fund” means the fund created pursuant to the Bond Ordinance.

“Swap Agreement” means any interest rate exchange or swap, hedge or other similar agreement or agreements entered into in connection with the issuance of obligations or other evidences of indebtedness or in connection with GLWA’s then Outstanding Senior Lien Bonds or Junior Lien Bonds within the limitations provided by Act 34 or its predecessor statute.

“Swap Provider” means any party with whom GLWA (as successor to the City or otherwise) has or shall enter into a Swap Agreement.

“System Consultant” means any professionally qualified person, firm or corporation nationally recognized in the municipal water supply industry and of favorable reputation for skill and experience in performing the duties of providing consulting services to municipal water systems comparable in size and function to the Water System, including setting of rates and charges for the use of such systems.

“Trustee” means U.S. Bank National Association or any successor independent bank or trust company qualified and appointed pursuant to the Bond Ordinance to act as Trustee hereunder and any company into which the Trustee may be merged or converted or with which it may be consolidated, or any company resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any company to which the Trustee may sell or transfer all or substantially all of its corporate trust business, provided such company shall be a trust company or bank which is qualified to be a successor Trustee under the Bond Ordinance, or any other bank or trust company at any time substituted in its place pursuant to the Bond Ordinance.

“Variable Rate Bonds” means any Bonds the interest rate on which is not fixed to maturity as of the date of the calculation being performed.

“Water and Sewer Services Agreement” means the Water and Sewer Services Agreement, dated June 12, 2015, between the City and GLWA relating to the provision of water supply service to the Retail Water Customers and sewage disposal service to Retail Sewer Customers, as it may be amended and supplemented as provided therein.

“Water System” means the City’s water supply system as existing immediately prior to the Effective Date, which on the Effective Date consists of the Regional Water System and the Local Water System, as the same may be improved from time to time.

“WRAP Fund” means the Water Residential Assistance Program Fund created pursuant to the Bond Ordinance, which is a fund independently-administered on behalf of GLWA to provide assistance to indigent residential customers throughout the Water System and the Sewer System.

APPENDIX V SUMMARY OF THE LEASE

This summary does not purport to be comprehensive or definitive and is subject to all of the terms of the Lease, to which reference is hereby made and copies of which are available on GLWA's website at www.glwater.org or from the Underwriters prior to the execution and delivery of the Series 2016 Bonds and thereafter may be examined or obtained at the expense of the person requesting the same at the corporate trust office of the Trustee.

General

On June 12, 2015, the City and GLWA executed (i) the Lease pursuant to which the City agreed to lease to GLWA the Leased Water Facilities and (ii) the Sewer Lease pursuant to which the City agreed to lease to GLWA the Leased Sewer Facilities. Complete copies of the Lease and the Sewer Lease are available on GLWA's website at www.glwater.org.

Pursuant to the Lease, the City leased the Leased Water Facilities and assigned and transferred its interest in all revenues derived from the sale of water supply services to the wholesale customers and the Retail Water Customers of the Water System to GLWA for the Term. On the Effective Date, the City conveyed to GLWA by lease for the Term all of the City's right, title and interest in and to the Leased Water Facilities in order to enable GLWA to operate the Leased Water Facilities as provided in the Lease. The City continues to own, operate and be responsible for the operation and maintenance of the Detroit Local Water Facilities, which consist of all water supply facilities that provide water supply services directly to the Retail Water Customers, all as more particularly described in the Water and Sewer Services Agreement. See APPENDIX VII—Summary of the Water and Sewer Services Agreement.

Term of the Lease

The term of the Lease (the "Term") commenced on the Effective Date and shall initially terminate on the 40th anniversary of the Effective Date (the "Initial Lease Termination Date"). Upon the issuance of Additional Bonds by GLWA with a maturity date after the Initial Lease Termination Date, the Initial Lease Termination Date shall automatically, and without further action of the parties to the Lease, be amended to coincide with the date on which all of the Bonds have been paid or provision for payment of all such Bonds has been made in accordance with the Bond Ordinance.

Assignment and Assumption

On the Effective Date, GLWA assumed all of the City's obligations under the DWSD Water Bonds, including all of the obligations to make payments of principal of and interest on the DWSD Water Bonds. In acquiring the Leased Water Facilities pursuant to the Lease, commencing on the Effective Date, GLWA also acquired for the Term, and the City absolutely and irrevocably assigned, transferred and conveyed to GLWA, and GLWA purchased and acquired from the City, (i) all of the City's right, title and interest in and to the Revenues, including the Retail Revenues, in existence on the Effective Date, and (ii) all of the City's right, title and interest in and to the Revenues, including Retail Revenues, derived from operation of the Water System on and after the Effective Date and through the end of the Term.

In addition, on the Effective Date, the City assigned and GLWA assumed the City's wholesale contracts related to the Regional Water System, existing DWSD vendor contracts related to the Regional Water System, the City's rights under the contracts with bond insurers and surety bond providers with respect to the DWSD Water Bonds and all other liabilities and obligations of the City with respect to the

Leased Water Facilities. GLWA also agreed to provide continuing disclosure with respect to information within its control relating to GLWA, the Leased Water Facilities and the DWSD Water Bonds that the City would otherwise have had to disclose on an annual basis pursuant to continuing disclosure undertakings entered into by the City with respect to the DWSD Water Bonds.

Retirement Obligations

As further consideration for the acquisition of the Regional Water System pursuant to the Lease, the Authority is required to pay that portion of the Pension Obligation allocable to the Regional Water System (the “Authority Pension Obligation”) and that portion of the BC Note Obligation allocable to the Regional Sewer System (the “Authority BC Note Obligation”). The City agrees that it is liable for and shall be required to pay that portion of the Pension Obligation allocable to the Local Water System (the “City Pension Obligation”) and that portion of the BC Note Obligation allocable to the Local Water System (the “City BC Note Obligation”). Amounts due for the Pension Obligation and the BC Note Obligation shall be allocated between the Authority and the City on the basis that such amounts are payable with respect to employees of the Authority and the City, respectively.

Rate Setting

Pursuant to the Lease, the City and GLWA agree that (i) GLWA shall have the exclusive right to establish rates for water service for customers of the Water System, including Retail Water Customers, (ii) GLWA may delegate its rights to establish rates for water service to customers of the Water System to one or more agents, as it deems necessary or convenient, and (iii) directly or through an agent, GLWA shall have the exclusive right to charge and bill to and collect from such customers amounts from water services constituting the Revenues, including the Retail Revenues. Under the Water and Sewer Services Agreement, GLWA has delegated to the City its rights to set and collect rates with respect to Retail Customers of the City.

Lease Payments

Part of the consideration for the Lease will be an allocation of \$22,500,000 per year (the “Lease Payment”), to be funded from a portion of the common-to-all revenue requirements for the Regional Water System. The Lease Payment will be retained by GLWA and applied as provided below. The Lease Payment will flow through the existing flow of funds under the Bond Ordinance, together with other funding requirements, after payment of Operations and Maintenance Expenses. The Lease Payment will not be treated as an Operation and Maintenance Expense and shall be applied solely, at the City’s direction and discretion, to the cost of improvements to the Local Water System (payable after debt service and pension liability payments in the flow of funds), the payment of debt service on Bonds associated with such improvements or the City’s share of debt service on Bonds associated with common-to-all improvements. Any Additional Bonds issued to finance Regional Water System improvements or Local Water System improvements will be issued by GLWA and will be secured by the Net Revenues.

Operation of Leased Water Facilities

GLWA agrees to operate the Leased Water Facilities for the purpose of furnishing water service to its customers in accordance with Applicable Laws and Prudent Utility Practices, all in a manner so as to provide water service to customers in the same or an improved manner as was provided by DWSD immediately prior to the Effective Date (collectively, the “Performance Standards”). In connection therewith, GLWA will pay all costs of operating, using, repairing, maintaining, replacing, enlarging, extending, improving, financing and refinancing the Leased Water Facilities, including by way of illustration and not by way of limitation, all capital costs, utility rates and charges, fees and other amounts

due under existing contracts, taxes and special assessments, salaries and other employment costs, permits and license fees and rents. GLWA has agreed that it will not cause or permit any waste, damage or injury to the Leased Water Facilities and to keep the Leased Water Facilities in good condition and repair (reasonable wear and tear, obsolescence and damage by act of God, fire or other causes beyond the control of GLWA excepted).

From and after the Effective Date, GLWA is obligated, at its own expense, to keep the Leased Water Facilities insured against any casualty loss and shall also obtain and maintain public liability insurance (covering bodily and personal injury, property damage and contractual liability), automobile liability insurance and worker's compensation insurance for the operation of the Leased Water Facilities and the Regional Water System in commercially reasonable amounts, provided that GLWA is be required to carry a particular type of insurance coverage as set forth in the Lease during any period that such insurance is not available in the insurance market of the United States at commercially reasonable rates. The insurance required of GLWA by the Lease in the amounts, with the coverage and other required features, may be supplied by a fully funded self-insurance program of GLWA or a self-insurance pool in which GLWA is a participant; provided that such self-insurance program or pool will provide the coverage required herein.

Destruction or Taking of Leased Water Facilities

If during the Term, any portion of the Leased Water Facilities is damaged or destroyed by fire or other casualty, GLWA is obligated to repair, restore, rebuild or replace the damaged or destroyed portion of the Leased Water Facilities and complete the same as soon as reasonably possible (subject to the adjustment and receipt of insurance proceeds, if any, and the Bond Ordinance), to at least the condition they were in prior to such damage or destruction, except for obsolescent facilities or changes in design or materials as may then be necessary to achieve the Performance Standards.

In the event of any taking of the Leased Water Facilities or any part thereof in or by condemnation or other eminent domain proceedings pursuant to any Applicable Laws, or by reason of the temporary requisition of the use or occupancy of the Leased Water Facilities or any part thereof by any governmental authority (each a "Taking"), GLWA will promptly notify the City upon receiving notice of such Taking or commencement of proceedings therefor. GLWA will then, if requested by the City, file or defend its claim thereunder and prosecute the same with due diligence to its final disposition. Subject to the terms of the Bond Ordinance, all proceeds or any award or payment in respect of any taking are hereby assigned and shall be paid to GLWA, and GLWA is permitted to take all steps reasonably necessary in its discretion to notify the condemning authority of such assignment. Such award or payment shall be applied to the Leased Water Facilities as necessary to achieve the Performance Standards.

If the Leased Water Facilities or any portion thereof are in whole or in part destroyed or damaged as a result of any cause whatsoever, or a Taking occurs with respect to the Leased Water Facilities or any portion thereof, there shall be no abatement, diminution or reduction in any Lease Payment payable under the Lease.

In the Lease, the City agrees not to commence any proceedings against the Leased Water Facilities that would constitute a Taking of all or any part of the Leased Water Facilities if the effect of such Taking is to render it impracticable for the Leased Water Facilities to furnish water service to GLWA's customers in accordance with the Performance Standards.

Improvements to Leased Water Facilities

During the Term, GLWA is entitled to make such rehabilitation of and replacements and improvements to the Leased Water Facilities as it determines to be necessary in order to keep the Leased Water Facilities in compliance with the Performance Standards. In connection therewith, GLWA, for each Fiscal Year will prepare and approve a Capital Improvement Program, which shall set forth the improvements to the Leased Water Facilities that GLWA proposes to undertake during the next five Fiscal Years.

In addition, during the Term, GLWA will review and revise as necessary the DWSD water master plan. In reviewing the plan, GLWA will use its best efforts to maximize utilization of the capacity in the Regional Water System so that economies of scale may be realized, shall take into account the needs of GLWA's service area in planning and operating the Regional Water System, shall strive to become the provider of choice for southeastern Michigan and shall consider incentives for customers to utilize the Regional Water System for their water supply needs.

Adoption of Budget; Rates for Use of Leased Water Facilities

GLWA adopted a budget for the Regional Water System for the period from the Effective Date through June 30, 2016, which was based on a bi-furcation between the Regional Water System and the Local Water System of the budget adopted by DWSD relating to the Water System for the Fiscal Year beginning July 1, 2015. Commencing with the Fiscal Year beginning July 1, 2016, the Authority is required to adopt a two-year budget for the Regional Water System for the following two Fiscal Years that sets forth budgeted Revenues and expenses for each such Fiscal Year. The budgeted expenses for each such Fiscal Year shall equal the sum of the projected expenses and revenue requirements for the Regional Water System for each such Fiscal Year (collectively, the "Authority Revenue Requirement"), including without limitation all of the following:

- (a) Operation and Maintenance Expenses of the Regional Water System;
- (b) The amounts necessary to pay the principal of and interest on all Bonds and to restore any reserves therefor established in the Bond Ordinance;
- (c) The Lease Payment, which shall be a common-to-all charge;
- (d) The Authority Pension Obligation and the Authority BC Note Obligation;
- (e) The amount necessary to be deposited to the WRAP Fund, which shall be a common-to-all charge equal to 0.5% of the base budgeted operating Revenues for the Regional Water System for such Fiscal Year;
- (f) The amounts needed to make the required deposits to the Authority Regional Extraordinary Repair and Replacement Account of the Extraordinary Repair and Replacement Reserve Fund and the Authority Regional Improvement and Extension Account of the Improvement and Extension Fund in the Bond Ordinance; and
- (g) The amount necessary to satisfy the coverage ratios required by the rate covenant to be included in the Bond Ordinance (collectively, the "Rate Covenant").

GLWA, for each Fiscal Year, shall fix and approve rates and charges to its customers in an amount that is expected to produce Revenues sufficient to satisfy the Authority Revenue Requirement. In

connection with the determination by the Authority of the rates and charges applicable to Retail Water Customers in the City for such Fiscal Year, the City shall receive a credit in the amount of \$20,700,000, representing the return on equity to the City for the Water System in recognition of the City's ownership of the Water System and support of the rate structure for the Water System.

As provided in the Lease, through the Fiscal Year ending June 30, 2025, the Water System is assumed to experience annual increases in the Authority Revenue Requirement of not more than 4%; provided however, this limitation shall not be applicable if the Authority Revenue Requirement must increase beyond the 4% assumption in order to satisfy the Rate Covenant or to pay the cost of improvements to the Leased Water Facilities that are required to be made by Applicable Laws.

In the Lease, the City acknowledges that all Revenues received from customers in the City, including Revenues derived exclusively from the Local Water System, are the property of the Authority and will be deposited as received in the Receiving Fund in the Bond Ordinance and applied as provided in the Bond Ordinance, including amounts deposited in the Budget Stabilization Fund. As a result, the City agrees to provide the Authority with a budget for the Local Water System as provided in the Water and Sewer Services Agreement.

Sale or Disposition of Leased Water Facilities or Detroit Local Water Facilities

Subject to the Bond Ordinance, GLWA, following notice to the City, has the right to sell or dispose of any of the Real Property or Personal Property that constitutes part of the Leased Water Facilities if GLWA determines that such Real Property or Personal Property is not or is no longer needed or useful in connection with the operation of the Leased Water Facilities or that such sale or disposition will not impair the operating efficiency of the Leased Water Facilities or reduce the ability of GLWA to satisfy the Rate Covenant as provided in the Bond Ordinance. To the extent necessary to accomplish such a sale of Personal Property, the Lease also constitutes a quit claim transfer by the City of any residual property rights it may have in and to such Personal Property. The City shall cooperate with GLWA in arranging the execution and delivery of a deed for the disposition of any Real Property. The proceeds of any such sale shall be deposited in the Receiving Fund established by the Bond Ordinance.

If the City sells or disposes of any real or personal property that constitutes part of the Detroit Local Water Facilities that was paid for in whole or in part with common-to-all funds, the proceeds of such sale or disposition shall be paid to GLWA in the same proportion that common-to-all funds were used to pay the purchase price, for deposit in the Receiving Fund established by the Bond Ordinance.

In connection with the sale or disposition of any of the Leased Water Facilities or any of the Detroit Local Water Facilities that were paid for in whole or in part with common-to-all funds, the City and GLWA shall cooperate and use their best efforts to sell such property at market value, exchange such property for other property of similar value or sell such property as otherwise agreed to by the parties.

Events of Default and Remedies

Events of Default. Under the Lease, the term "Event of Default" means the occurrence of any one of the following events:

(a) GLWA's failure to pay any Lease Payment (without setoff, recoupment, or other deduction of any kind) when due.

(b) GLWA's failure to fully perform and comply with any of the other terms, conditions or provisions of the Lease within ninety (90) days after delivery to GLWA of a written notice from the City specifying such failure.

(c) The City's failure to fully perform and comply with any of the terms, conditions or provisions of the Lease within ninety (90) days after delivery to the City of a written notice from GLWA specifying such failure.

Remedies.

(1) If an Event of Default set forth in (a) or (b) above occurs, the City, subject to the dispute resolution procedures described below under "Dispute Resolution" (the "Dispute Resolution Procedures"), shall have all rights and remedies available to the City at law or in equity, including specific performance.

(2) If an Event of Default set forth in (c) above occurs, GLWA, subject to the Dispute Resolution Procedures, shall have all right and remedies available to GLWA at law or in equity, including specific performance.

(3) Notwithstanding anything else to the contrary in the Lease, so long as Bonds are outstanding, neither the City nor GLWA shall have any right to terminate the Lease at any time prior to the end of the Term, whether or not an Event of Default has occurred.

(4) The City's or GLWA's failure to insist upon the strict performance of any agreement, term, covenant or condition of the Lease or to exercise any right or remedy for breach of or Event of Default under the Lease shall not constitute a waiver of any such breach or Event of Default. Similarly, the City's acceptance of full or partial Lease Payments during any such breach by or Event of Default attributable to GLWA shall not constitute a waiver of any such breach or Event of Default. No waiver of any breach or Event of Default shall affect or alter this subsection and every term, covenant, condition and provision of the Lease shall continue in full force and effect with respect to any other then existing or subsequent breach or Event of Default.

(5) Subject to (3) above and the Dispute Resolution Procedures, each right and remedy provided in the Lease shall be cumulative and shall be in addition to every other right or remedy provided for in the Lease or now or later existing at law or in equity either by statute or otherwise. The City's or GLWA's exercise of any one or more of its rights or remedies shall not preclude the City's or GLWA's simultaneous or later exercise of any or all of its other rights or remedies under the Lease.

Dispute Resolution

Disputes; Resolution.

GLWA and the City shall each designate in writing to the other from time to time a representative who shall be authorized to resolve any dispute relating to the subject matter of the Lease in an equitable manner and, unless otherwise expressly provided herein, to exercise the authority of such party to make decisions by mutual agreement.

The City and GLWA each agree (i) to attempt to resolve all disputes arising under the Lease promptly, equitably and in a good faith manner and (ii) to provide each other with reasonable access during normal business hours to any and all non-privileged written records, information and data pertaining to any such dispute.

If any dispute relating to the subject matter of the Lease is not resolved between the City and GLWA within 30 days (or such later date agreed to by the parties) from the date on which a party provides written notice to the other party of such dispute and of the notifying party's position on the disputed matter, then upon written notification by either party to the other party, such dispute shall be settled exclusively and finally by arbitration as described under "Arbitration" below. During the pendency of any dispute and until such dispute is resolved as provided below, the City and GLWA shall continue to operate under the terms of the Lease.

Arbitration.

Any dispute or claim arising under or relating to the Lease that cannot be resolved between the City and GLWA, including any matter relating to the interpretation or performance of the Lease, shall be submitted to arbitration irrespective of either the magnitude thereof or the amount in dispute.

Each arbitration between the City and GLWA shall be conducted pursuant to the Uniform Arbitration Act, Act No. 371, Public Acts of Michigan, 2012 and before a panel composed of three arbitrators (the "Arbitration Panel"). Each party shall appoint an arbitrator, obtain its appointee's acceptance of such appointment and deliver written notification of such appointment and acceptance to the other party within 15 days after delivery of a notice of arbitration. The two arbitrators appointed by the City and GLWA shall jointly appoint the third (who shall be the chairperson), obtain the acceptance of such appointment and deliver written notification of such appointment within 15 days after their appointment and acceptance.

Any arbitration commenced hereunder shall be completed within 120 days after the appointment of the Arbitration Panel absent agreement of the City and GLWA to the contrary. Further, absent agreement of the City and GLWA or, upon request of one of the parties, an order of the Arbitration Panel to the contrary: (i) all discovery shall be completed within 60 days after the appointment of the Arbitration Panel; (ii) each party shall be limited to a maximum of 5 depositions; (iii) each deposition shall be completed within a maximum period of two consecutive 8-hour days; (iv) each party shall be limited to 2 expert witnesses; and (v) interrogatories shall be limited to a maximum of 50 single issues without sub-parts. The City and GLWA waive any claim to any damages in the nature of punitive, exemplary or statutory damages in excess of compensatory damages or otherwise expressly provided for in the Lease, and the Arbitration Panel is specifically divested of any power to award such damages. The Arbitration Panel shall have the power to award injunctive or other equitable relief. All decisions of the Arbitration Panel shall be pursuant to a majority vote. Any interim or final award shall be rendered by written decision.

If either the City or GLWA fails to appoint its arbitrator within 15 days after delivery of a notice of arbitration, or if the two arbitrators appointed cannot agree upon the third arbitrator within 15 days after appointment of the second arbitrator, then the required arbitrator(s) shall be appointed by the American Arbitration Association or as otherwise agreed by the City and GLWA.

No arbitrator shall be a past or present employee or agent of, or consultant or counsel to, either the City or GLWA or any affiliate of either the City or GLWA.

GLWA and the City shall each bear the out-of-pocket costs and expenses of their respective arbitrator, attorneys and witnesses, and they shall each bear one-half of the out-of-pocket costs and expenses of the chairperson of the Arbitration Panel and all administrative support for the arbitration.

Appeals and Enforcement of Arbitration Awards and Decisions. The City or GLWA may appeal an award or decision issued by the Arbitration Panel may enforce any awards or decisions of the

Arbitration Panel as provided in the Lease. The remedies described under “Dispute Resolution” shall be the sole and exclusive remedies of the City and GLWA with respect to any claim, dispute or Event of Default under the Lease. The City and GLWA agree not to bring, or cause to be brought, in a court of law any action, proceeding or cause of action whatsoever with respect to any such claim, dispute or Event of Default, other than as necessary to enforce the award or decision of the Arbitration Panel as provided in the Lease.

Amendments to Lease

The Lease may be amended from time to time by agreement of the City and GLWA. Any such amendment shall not be effective unless the amendment is in writing and is executed by the Mayor of the City and the duly authorized officers of GLWA; provided, however, that the Lease shall not be subject to any amendment which would in any manner affect either the security for the Bonds or the prompt payment of the principal of and interest thereon.

APPENDIX VI SUMMARY OF THE BOND ORDINANCE

This summary does not purport to be comprehensive or definitive and is subject to all of the terms of the Bond Ordinance, to which reference is hereby made and copies of which are available on GLWA's website at www.glwater.org or from the Underwriters prior to the execution and delivery of the Series 2016 Bonds and thereafter may be examined or obtained at the expense of the person requesting the same at the corporate trust office of the Trustee.

The Revenue Receipts Fund and the Receiving Fund

Under the Bond Ordinance, consistent with the sale, assignment and transfer of Revenues contained in the Lease, GLWA and the City, as agent of GLWA under the Water and Sewer Services Agreement, shall deposit or cause to be deposited all Revenues each receives from operation of the Regional Water System and the Local Water System in the GLWA Revenue Receipts Fund established under the Bond Ordinance. GLWA shall allocate moneys in the GLWA Revenue Receipts Fund between the Water System and the Sewer System and cause funds related to the Regional Water System and Local Water System to be deposited in the Receiving Fund. The City shall act as an agent of GLWA when collecting the Retail Revenues, and shall hold the Retail Revenues in trust for the exclusive benefit of GLWA until such funds are transferred to the Trustee and deposited in the GLWA Revenue Receipts Fund.

Flow of Funds

Under the Bond Ordinance, in accordance with the requirements of Act 94 and the Lease, GLWA has established certain funds and accounts for the Water System under the Bond Ordinance to be held in trust by the Trustee. The Bond Ordinance permits the establishment of additional funds for additional priorities of GLWA Bonds.

In accordance with the terms of Act 94 and the Bond Ordinance, all Revenues of the Water System shall be deposited with the Trustee and, with the exception of Revenues transferred to the GLWA Regional Operation and Maintenance Account or the Detroit Local Operation and Maintenance Account of the Operation and Maintenance Fund as directed by GLWA as provided in the Bond Ordinance, held in trust pursuant to the terms of the Bond Ordinance. The Lease and the Bond Ordinance provide that, subject to the issuance of Bonds permitted by the Bond Ordinance to satisfy all or a portion of the Pension Obligation, pursuant to the provisions of paragraph 24 of the Bankruptcy Order, DWSD's contribution to the GRS pension plan set forth in the Plan of Adjustment shall be payable as follows: (i) the portion of that contribution equal to \$24 million annually, plus DWSD's share of the annual "defined contribution" payments related to its employees (as such term is used in the Bankruptcy Order), both to be allocated between the Sewer System and the Water System, will be paid by the Trustee as Operation and Maintenance Expenses under priority "First" below, and (ii) the difference between DWSD's annual GRS pension plan contribution provided for in the Plan of Adjustment and \$24 million will be paid by the Trustee out of the Pension Obligation Payment Fund under priority "Fifth" below.

As of the first day of each month (or, in the case of the transfer to the respective Reserve Account, following the annual July 1 valuation of investments in such Reserve Account, pursuant to the Bond Ordinance), amounts credited to the Receiving Fund, including any Lease Payment (which is to be applied to the Fund(s) and Account(s) designated by the City pursuant to the Lease) shall be transferred seriatim into the following funds and accounts but only within the respective limitations and only if the maximum amount within such limitation has been credited to the preceding fund or account:

First: to the Authority Regional Operation and Maintenance Account and the Detroit Local Operation and Maintenance Account of the Operation and Maintenance Fund, 1/12 of the then current Fiscal Year's Operation and Maintenance Expenses of the Regional Water System and the Local Water System, respectively, as determined by GLWA and certified to the Trustee by an Authorized Officer as sufficient to provide for the payment of the next month's expenses of administration and operation of the Regional Water System and the Local Water System, respectively, and such current expenses for the maintenance thereof as may be necessary to preserve the same in good repair and working order;

Second: to the Senior Lien Bond Debt Service Account, an amount that, when added to all other amounts then on deposit therein, shall equal the Debt Service Installment Requirement for Bonds as of the first day of such month;

Third: following the annual July 1 valuation of investments in the Senior Lien Bond Reserve Account pursuant to the Bond Ordinance, to the Senior Lien Bond Reserve Account, an amount, if any, that when added to all other amounts then on deposit therein shall equal the Reserve Requirement for Senior Lien Bonds;

Fourth: to the Bond Interest and Redemption Fund established for each Priority of Lien of Junior Lien Bonds, beginning with the Second Lien Bonds and continuing in descending order of priority to, and including, each Priority of Lien of Junior Lien Bonds, as follows:

First: to the Debt Service Account established for such Priority of Lien, an amount that, when added to amounts then on deposit in such account, shall equal the Debt Service Installment Requirement for Junior Lien Bonds of such Priority of Lien as of the first day of such month; and

Second: following the annual July 1 valuation of investments in the Reserve Accounts pursuant to the Bond Ordinance, to the Reserve Account, if any, established for such Priority of Lien, an amount that, when added to amounts then on deposit in such account, shall equal the Reserve Requirement for such Priority of Lien of Junior Lien Bonds;

Fifth: except as provided in the Bond Ordinance with respect to the initial deposit to the Pension Obligation Payment Fund, to the extent Pension Junior Lien Bonds are not issued, to the Pension Obligation Payment Fund an amount that equals 1/12 of the Required Annual GRS Payment and 1/12 of the BC Note Obligation at the written direction of an Authorized Officer to the Trustee;

Sixth: except as provided in the Bond Ordinance with respect to the initial deposit to the Water Residential Assistance Program ("WRAP") Fund, to the WRAP Fund, 1/12 of the amount to be deposited therein for the current Fiscal Year as directed in writing by an Authorized Officer to the Trustee;

Seventh: except as otherwise provided in the Bond Ordinance with respect to the initial deposit to the Budget Stabilization Fund, for each of the Fiscal Years 2016, 2017 and 2018, to the Budget Stabilization Fund, an amount equal to 1/12 of one-third of the amount necessary to assure that the Budget Stabilization Requirement will be on deposit in the Budget Stabilization Fund within three full Fiscal Years at the written direction of an Authorized Officer to the Trustee

and for subsequent Fiscal Years thereafter 1/12 of an amount that when added to amounts then on deposit in the Budget Stabilization Fund shall equal the Budget Stabilization Requirement, at the written direction of an Authorized Officer to the Trustee;

Eighth: to the Extraordinary Repair and Replacement Reserve Fund, the amount of the Extraordinary Repair and Replacement Minimum Requirement to the extent that the balance thereof is less than the Extraordinary Repair and Replacement Maximum Requirement; and

Ninth: at the written direction of an Authorized Officer to the Trustee, to the Authority Improvement and Extension Account and the Detroit Local Improvement and Extension Account of the Improvement and Extension Fund, such amounts as GLWA may deem advisable for the Regional Water System and Local Water System; provided that no amount shall be deposited in either such account for so long as a withdrawal from the Extraordinary Repair and Replacement Reserve Fund remains unpaid.

In any month, funds on deposit in the Receiving Fund in excess of the requirements set forth above may, upon the direction of GLWA, be transferred to the Improvement and Extension Fund (provided that no amount shall be deposited to the Improvement and Extension Fund or credited thereto for so long as a withdrawal from the Extraordinary Repair and Replacement Reserve Fund remains unpaid).

Any amounts remaining in the Receiving Fund as of the last day of each Fiscal Year shall be applied against future years' Revenue deposit obligations under the Bond Ordinance, unless directed by GLWA within thirty (30) days of completion of the Fiscal Year's audited financial statements to be deposited in the Surplus Fund.

Priority of Funds and Accounts

Pursuant to the Bond Ordinance, if amounts in the Receiving Fund are insufficient to provide for current requirements of the Operation and Maintenance Fund and each Bond Interest and Redemption Fund (including the Reserve Account, if any, therein), then any amounts or securities held in the Surplus Fund, the Improvement and Extension Fund, the Extraordinary Repair and Replacement Reserve Fund, the WRAP Fund, the Budget Stabilization Fund and the Pension Obligation Payment Fund shall be credited or transferred from such Funds in the order listed, first, to the Operation and Maintenance Fund and, second, to the particular Bond Interest and Redemption Fund, to the extent of the insufficiency therein.

If any debt service on Bonds of the same Priority of Lien becomes due (whether on a stated or scheduled date, by reason of call for redemption or otherwise), and there are insufficient amounts for the payment thereof in the Bond Interest and Redemption Fund established for Bonds of such Priority of Lien after applying payments in any Reserve Account established for Bonds of such Priority of Lien, then there shall be applied by the Trustee to such payment amounts in each Bond Interest and Redemption Account established for Series of Bonds of each lower Priority of Lien, beginning with the lowest Priority of Lien and proceeding seriatim in ascending order of Priority of Lien, until such payments are made in full.

Operation and Maintenance Fund

The Operation and Maintenance Fund consists of two accounts, the Authority Regional Operation and Maintenance Account and the Detroit Local Operation and Maintenance Account, and within each account a Pension Obligation Subaccount. The Operation and Maintenance Fund shall not be part of the Trust Estate held for the benefit of Holders, who shall have no interest in such Fund whatsoever. Any

funds at any time on deposit in or credited to the Operation and Maintenance Fund are not and shall not be Pledged Assets.

Amounts in the Authority Regional Operation and Maintenance Account of the Operation and Maintenance Fund shall be used to pay the expenses of administration and operation of the Regional Water System and such current expenses for the maintenance thereof as may be necessary to preserve the same in good repair and working order. The Authority shall have sole and exclusive authority to withdraw funds from the Authority Regional Operation and Maintenance Account of the Operation and Maintenance Fund to pay the expenses of administration and operation of the Regional Water System and such current expenses for the maintenance thereof as may be necessary to preserve the same in good repair and working order as it, in its sole discretion, may at any time and from time to time deem necessary or appropriate. The Regional Water System's allocable share of the Pension Obligation that is required to be paid as an Operation and Maintenance Expense pursuant to the Bankruptcy Order shall be deposited and held in the Pension Obligation Subaccount until paid to GRS. No other Person, shall have the right or authority to use or withdraw funds from the Authority Regional Operation and Maintenance Account of the Operation and Maintenance Fund.

Amounts in the Detroit Local Operation and Maintenance Account of the Operation and Maintenance Fund shall be used to pay the expenses of administration and operation of the Local Water System and such current expenses for the maintenance thereof as may be necessary to preserve the same in good repair and working order. The City shall have sole and exclusive authority to withdraw funds from the Detroit Local Operation and Maintenance Account of the Operation and Maintenance Fund to pay the expenses of administration and operation of the Local Water System and such current expenses for the maintenance thereof as may be necessary to preserve the same in good repair and working order as it, in its sole discretion, may at any time and from time to time deem necessary or appropriate. The Local Water System's allocable share of the Pension Obligation that is required to be paid as an Operation and Maintenance Expense pursuant to the Bankruptcy Order shall be deposited and held in the Pension Obligation Subaccount until paid to GRS. No other Person, shall have the right or authority to use or withdraw funds from the Detroit Local Operation and Maintenance Account of the Operation and Maintenance Fund.

Certain Other Funds

The Extraordinary Repair and Replacement Reserve Fund

Under the Bond Ordinance, amounts in the Extraordinary Repair and Replacement Reserve Fund may be used by GLWA to pay costs of making major unanticipated repairs and replacements to the Regional Water System which individually have cost or are reasonably expected to cost in excess of \$1 million as determined by the GLWA Board. GLWA may withdraw funds from the Extraordinary Repair and Replacement Fund for such purposes at any time and from time to time upon written request to the Trustee therefor.

Amounts in the Extraordinary Repair and Replacement Reserve Fund may also be used by the City to pay costs of making major unanticipated repairs and replacements to the Local Water System which individually have cost or are reasonably expected by the GLWA Board to cost in excess of \$1 million as determined by the GLWA Board based on certifications provided by an authorized officer of the City. The City may withdraw funds from the Extraordinary Repair and Replacement Fund for such purposes at any time and from time to time upon written request to GLWA and the Trustee therefor.

The Pension Obligation Payment Fund

Under the Bond Ordinance, subject to the issuance of Pension Junior Lien Bonds to satisfy all or a portion of the Pension Obligation, at the written direction of an Authorized Officer to the Trustee, the Trustee shall pay from the Revenues of the Water System on deposit in the Pension Obligation Payment Fund, on the same ratable basis as the allocation of payroll costs between the Water System and the Sewer System, (i) to GRS the difference between the annual allocation of the Plan of Adjustment GRS pension contributions provided in the Plan of Adjustment and \$24 million in the aggregate, and (ii) the Water System's allocable share of the BC Note Obligation, as determined by GLWA.

Subject to the flow of funds as provided in the Bond Ordinance, at the written direction of an Authorized Officer to the Trustee, sufficient funds shall be allocated and disbursed by the Trustee, to the Pension Obligation Payment Fund on a monthly basis until such time as the Pension Obligation Payment Fund contains funds sufficient to pay (i) the difference between the Water System's allocable share of the annual allocation of the Pension Obligation contributions required to be paid to GRS as provided in the Plan of Adjustment, and the Water System's allocable share of \$24 million (the "Required Annual GRS Payment") and (ii) the Water System's allocable share of the BC Note Obligation as provided in the Plan of Adjustment, as determined by the Authority.

The WRAP Fund

Under the Bond Ordinance, the WRAP Fund shall be used to provide assistance to indigent residential customers throughout the Water System and the Sewer System as directed by an Authorized Officer to the Trustee.

The Budget Stabilization Fund

Under the Bond Ordinance, the Budget Stabilization Fund shall be maintained in the amount of the Budget Stabilization Requirement. Moneys in the Budget Stabilization Fund may be applied by GLWA in its discretion for any lawful purpose of the Water System in the event of shortfalls in the Retail Revenues attributable to unfavorable variances between actual bad debt expenses and budgeted bad debt expenses of Retail Water Customers as a class. At least quarterly, in connection with the preparation of the annual audit for the Local Water System and the Local Sewer System, the Chief Financial Officers of the Authority and the DWSD-R shall determine whether a draw on the Budget Stabilization Fund is necessary in accordance with the requirements and procedures set forth in the Water and Sewer Services Agreement. If so, an Authorized Officer may provide written direction to the Trustee to draw on the Budget Stabilization Fund an amount equal to the amount by which the actual bad debt expenses of the Retail Water Customers as a class exceeds the budgeted bad debt expenses of that class, and deposit such amount into the appropriate fund or account. Amounts on deposit in the Budget Stabilization Fund in excess of the Budget Stabilization Requirement for the following Fiscal Year based on audited financial statements shall be transferred to the Detroit Local Improvement and Extension Account of the Improvement and Extension Fund. The deposit of Retail Revenues in the Budget Stabilization Fund shall be subordinate to payment of Operation and Maintenance Expenses and the payment of principal of and interest on the Bonds.

The Improvement and Extension Fund

The Improvement and Extension Fund consists of two accounts, the Authority Regional Improvement and Extension Account and the Detroit Local Improvement and Extension Account. Under the Bond Ordinance, amounts in the Authority Improvement and Extension Account and the Detroit Local Improvement and Extension Account of the Improvement and Extension Fund shall be used for improvements, enlargements or extensions to the Regional Water System and the Local Water System, respectively. The Authority may withdraw funds from the Authority Regional Improvement and

Extension Account of the Improvement and Extension Fund for the purposes of paying the costs of improvements, enlargements or extensions to the Regional Water System at any time and from time to time upon written request to the Trustee therefor and may withdraw funds from the Extraordinary Repair and Replacement Reserve Fund for such purposes as provided in the second paragraph under “Extraordinary Repair and Replacement Reserve Fund” above. The City may withdraw funds from the Detroit Local Improvement Account of the Improvement and Extension Fund for the purpose of paying the costs of improvements, enlargements or extensions to the Local Water System at any time and from time to time upon written request to the Trustee therefor.

The Surplus Fund; Uses and Replenishments of Deficits in Other Funds

Under the Bond Ordinance, amounts from time to time on deposit in the Surplus Fund may, at the option of GLWA, be withdrawn upon written request to the Trustee and used for any purposes related to the Water System; provided, however, that, if and whenever there should be any deficit in the Operation and Maintenance Fund or in any Bond Interest and Redemption Fund (excluding any Reserve Account therein), then transfers shall be made by GLWA from the Surplus Fund to such funds in the priority and order described above under “Priority of Funds and Accounts” above to the extent of any such deficit.

Construction Fund

The Construction Fund consists of two accounts, the Authority Regional Construction Account and the Detroit Local Construction Account. The Construction Fund shall not be part of the Trust Estate held for the benefit of Holders, who shall have no interest in such Fund whatsoever. Any funds at any time on deposit in or credited to the Construction Fund are not and shall not be Pledged Assets.

Amounts in the Authority Regional Construction Account and the Detroit Local Construction Account of the Construction Fund shall be used to pay the cost of repairs, extensions, enlargements, and improvements to the Regional Water System and the Local Water System, respectively, and any Issuance Costs. A separate account shall be established at the direction of the Authority within the Construction Fund, entitled “Issuance Costs Account,” from which the Custodian shall pay the Issuance Costs related to Outstanding Bonds and any Additional Bonds issued subject to the Bond Ordinance. The Authority and the City each shall have sole and exclusive authority to withdraw funds from the Authority Regional Construction Account and the Detroit Local Construction Account, respectively, for such purposes as they, in their sole discretion, may at any time and from time to time deem necessary or appropriate. No other Person shall have the right or authority to use or withdraw funds from the Construction Fund.

Any unexpended balance remaining in an account of the Construction Fund may in the discretion of the Authority be used for meeting any Reserve Requirement or for further improvements, enlargements and extensions to the Regional Water System or the Local Water System, as the case may be, if, at the time of such expenditure, such use based upon an opinion of Bond Counsel, is permitted by the Bond Ordinance and, in the case of Tax-Exempt Bonds, will not adversely affect the exclusion from gross income for federal income tax purposes of the Series of Bonds, the proceeds of which were deposited in such account. Any remaining balance after such expenditure shall be paid into the Bond Interest and Redemption Fund established for the Series of Bonds of the Priority of Lien giving rise to such balance for the purpose of purchasing Bonds of such Priority of Lien or used for the purpose of calling such Bonds for redemption. The Authority may provide additional or different lawful uses for such unexpended balance or remaining balance by Series Ordinance which shall, nonetheless, be subject to the Authority’s relevant tax covenants.

Rebate Fund

The Rebate Fund shall be maintained by the Trustee as a separate depository account. The Rebate Fund is not pledged as security for any Bonds and is established for the sole purpose of paying to the United States the amounts required to be rebated pursuant to Section 103(c)(6) of the Code. Rebate calculations shall be obtained by the Trustee at the written direction of the Authority. Transfers to the Rebate Fund from the Operation and Maintenance Fund may be directed by the Authority to the Trustee in writing. The Authorized Officer shall direct the Trustee to transfer to the Rebate Fund, an amount sufficient to make the amount on deposit in the Rebate Fund equal to 100% of the amount certified by the Authority as the amount required to be rebated to the United States pursuant to Section 103(c)(6) of the Code as of the close of the bond year (as defined in the Code) for the related Series of Bonds. Such amount shall be certified by an Authorized Officer to the Trustee. The Trustee shall make payments to the United States from the Rebate Fund at the written direction of an Authorized Officer to the Trustee, no less frequently than every five years, or as otherwise provided in Section 103(c)(6) of the Code, or in a non-arbitrage and tax compliance certificate related to a Series of Tax-Exempt Bonds, together with all investment earnings thereon as the Authorized Officer shall direct. The Trustee shall retain records of determination of the amounts deposited in the Rebate Fund, the proceeds of any investments of moneys in the Rebate Fund and the amounts paid to the United States, until the date six years after the payment in full of the related Series Bonds. If the Rebate Fund is overfunded, as determined at the market value of any investments therein, at the written direction of an Authorized Officer to the Trustee, the Trustee shall withdraw the excess and return such excess to the Receiving Fund.

Rate Covenant

The Bond Ordinance contains a covenant to fix, charge and collect, or cause to be fixed, charged and collected, rates, fees and charges for the use and operation of the Water System. Such rates, fees and charges shall be fixed and revised from time to time as may be expected to be necessary to produce the greater of:

1. The amounts required:
 - a. To provide for the payment of Operation and Maintenance Expenses of the Water System; and
 - b. To provide for the payment of all Debt Service Installment Requirements coming due during the Fiscal Year of calculation; and
 - c. To provide for the creation and maintenance of reserves therefor as required by the Bond Ordinance; and
 - d. To provide for the payment of the Lease Payment; and
 - e. To provide for the deposit to the WRAP Fund; and
 - f. To repay any withdrawals from the Extraordinary Repair and Replacement Fund; and
 - g. To provide for such other expenditures and funds for the Water System as the Bond Ordinance may require; and

2. Amounts so that the Rate Covenant Debt Service Coverage shall not be less than the Required Coverage; and

3. Amounts required by Act 94.

The coverage requirements for determining the Required Coverage under the Bond Ordinance are the following percentages:

	Priority of Lien of Bonds:	Percentage:
Senior Lien Bonds		120%
Second Lien Bonds		110%
SRF Junior Lien Bonds and Pension Junior Lien Bonds		100%

Additional Bonds

Under the Bond Ordinance, GLWA may not incur any obligations payable from Pledged Assets except Bonds, and no obligations of GLWA may be secured by a lien on Pledged Assets except as provided in the Bond Ordinance.

Coverage Requirements

Under the Bond Ordinance, prior to or concurrently with the issuance of Additional Bonds of any Priority of Lien, GLWA shall calculate a number equal to Projected Net Revenues in the then current or the next succeeding Fiscal Year, or Historical Net Revenues, all as determined by GLWA, divided by Maximum Annual Debt Service for such Priority of Lien and any higher Priority of Lien (the “Additional Bonds Debt Service Coverage”). GLWA may elect to determine Additional Bonds Debt Service Coverage on the basis of Projected Net Revenues or Historical Net Revenues. In determining Projected Net Revenues, GLWA shall engage the services of and be guided by a professionally qualified person, firm or corporation nationally recognized in the municipal water supply industry and of favorable reputation for skill and experience in performing the duties of providing consulting services to municipal water systems comparable in size and function to the Water System, including setting of rates and charges for the use of such systems (a “System Consultant”). In determining Historical Net Revenues, GLWA may engage the services of and be guided by a System Consultant if it is relying on audited financial statements without augmenting Net Revenues on the basis of changes in rates, fees or charges or repairs, extensions, enlargements, improvements, acquisitions, extensions or connections to the Water System. In determining Historical Net Revenues, GLWA shall engage the services of and be guided by a System Consultant if it is augmenting Net Revenues on such a basis.

General Authority

Under the Bond Ordinance, GLWA may issue Additional Bonds of any Priority of Lien for repairs, extensions, enlargements, and improvements to the Regional Water System or the Local Water System (including repaying amounts withdrawn from the Extraordinary Repair and Replacement Reserve Fund for the Regional Water System or the Local Water System), and/or refunding all or a part of any outstanding Bonds and paying the costs of issuing such Additional Bonds, including deposits, if any, to be made to any Reserve Account established or to be established for such Additional Bonds or any other Bonds, if, but only if GLWA shall certify that the Additional Bonds Debt Service Coverage for each Priority of Lien (regardless of the Priority of Lien of the Additional Bonds) is not less than the Required Coverage. The determination in a Series Ordinance that the Additional Bonds Debt Service Coverage for each Priority of Lien is not less than the Required Coverage shall be conclusive.

Alternate Test for Refundings

Under the Bond Ordinance, GLWA may issue Additional Bonds of any Priority of Lien, including a portion of a Series of Additional Bonds, without regard to the above requirements for refunding all or part of Bonds then Outstanding and paying costs of issuing such Additional Bonds, including deposits which may be made to any Reserve Account established or to be established for such Additional Bonds or any other Bonds if, but only if: the aggregate Debt Service Installment Requirements required to be set aside in the Bond Fund in the current Fiscal Year and each Fiscal Year thereafter until maturity on (A) the Additional Bonds and (B) giving effect to the refunding, all outstanding unrefunded Bonds of equal and higher Priority of Lien, is less than the aggregate Debt Service Installment Requirements required to be set aside in the Bond Fund in the current Fiscal Year and each Fiscal Year thereafter until maturity on all equal and higher Priority of Lien Bonds, without giving effect to the refunding.

Events of Default and Remedies

Events of Default. Each of the following events is an “Event of Default” under the Bond Ordinance:

- (a) the Authority shall default in the payment of the principal or Redemption Price of any Bond or Bonds when and as the same shall become due, whether at maturity or upon redemption or otherwise; or
- (b) payment of any installment of interest on any Bond or Bonds shall not be made, when and as the same shall become due.

No default in the payment of the principal of, interest on or Redemption Price of any Junior Lien Bond shall be considered a default for any Senior Lien Bond.

Remedies. Upon the happening and continuance of any Event of Default specified above, the Trustee may, or upon the request of the Holders of not less than 20% in principal amount of the Outstanding Bonds shall proceed, in its own name, to protect and enforce its rights and the rights of the Bondholders, by suit, action, or other proceedings, and to protect and enforce the statutory lien on the Net Revenues and enforce and compel the performance of all duties of the officials of the Authority. The Trustee shall on behalf of the Bondholders be entitled as a matter of right, upon application to a court of competent jurisdiction, to have appointed a receiver of the Authority for the business and property of the Water System, or any part thereof, including all Revenues, issues, income, receipts and profits derived, received or had by the Authority thereof or therefrom, with such power as the Authority may have to operate and maintain such business and property, collect, receive and apply all Revenues, income, receipts and profits arising therefrom, and prescribe fees and other charges in the same way and manner as the Authority might do. The Trustee is entitled to indemnification against fees, costs, expenses and liabilities for its enforcing any of the remedies permitted by the Bond Ordinance on the terms provided therein in connection with its exercise of any of the foregoing remedies.

Limitation on Rights of Bondholders

No individual Bondholders may initiate legal proceedings to enforce rights under the Bond Ordinance unless such Holder shall have given to the Trustee written notice of the Event of Default or breach of duty on account of which such proceeding is to be taken, and unless the Holders of not less than 20% in principal amount of all Bonds then Outstanding have made written request of the Trustee after the right to exercise such right of action has occurred, and have afforded the Trustee a reasonable opportunity

either to exercise the powers granted to it under the Bond Ordinance or to institute such proceedings in its name and unless, also, there has been offered to the Trustee reasonable security and indemnity against fees, costs, expenses and liabilities, and the Trustee has refused or neglected to comply with such request within a reasonable time.

Application of Revenues and Other Moneys After Default

After an Event of Default, the Trustee shall have a first lien on the Pledged Assets with right of payment for all reasonable fees, charges, costs and expenses made in the performance of the duties of the Trustee and for the cost and expense included in defending any liability, unless such liability is adjudicated to have resulted from the gross negligence or willful misconduct of the Trustee (collectively the "Trustee's Default Fees and Costs"). During the continuance of an Event of Default, the Trustee, except as otherwise provided in the provisions of the Bond Ordinance relating to remedies, shall apply moneys, securities, funds and Revenues and the investment income thereon in the Funds and Accounts as follows and in the following order:

(i) to the payment of the Trustee's Default Fees and Costs and the reasonable fees, charges, costs, expenses and liabilities of the System Consultant selected by the Authority pursuant to the Bond Ordinance;

(ii) to the payment of the amounts required for reasonable and necessary Operation and Maintenance Expenses; and for the reasonable renewals, repairs and replacements of the Leased Water Facilities necessary to prevent loss of Revenues, as certified to the Trustee by the System Consultant. For this purpose the books of records and accounts of the Authority relating to the Regional Water System shall at all times be subject to the inspection of the System Consultant during the continuance of such Event of Default; and

(iii) to the payment of the interest and principal or Redemption Price then due on the Senior Lien Bonds or Junior Lien Bonds, as follows:

First: To the payment to the persons entitled thereto of all installments of interest on Senior Lien Bonds (including payments in the nature of interest payable to Swap Providers), then due in 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 thereof ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference; and

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

Third: To the payment to the persons entitled thereto of all installments of interest on Junior Lien Bonds, including payments in the nature of interest payable to a Swap Provider under a Swap Agreement, then due in order of Priority of Lien and order of maturity of such installments, and, if the amount available shall not be sufficient to pay in full any installment, then to the payment thereof ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference; and

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

Fifth: To the payment to any Swap Provider of any termination payment due and payable under a Swap Agreement, and if the amounts available shall not be sufficient to pay in full all termination payments due under the Swap Agreements then to the payment thereof ratably according to the amounts of termination payments due on such date to the persons entitled thereto without any discrimination or preference.

If and whenever all overdue installments of interest on all Senior Lien Bonds and Junior Lien Bonds, together with the reasonable fees, charges, costs, expenses and liabilities of the Trustee and the System Consultant, and all other sums payable by the Authority to the Trustee under the Bond Ordinance, including the principal and Redemption Price of and accrued unpaid interest on the Senior Lien Bonds and Junior Lien Bonds which shall then be payable, shall either be paid by or for the account of the Authority, or provision satisfactory to the Trustee shall be made for such payment, and all defaults under the Bond Ordinance shall be made good or secured to the satisfaction of the Trustee or provision deemed by the Trustee to be adequate shall be made therefor, the Trustee shall pay over to the Authority all moneys, securities, funds and Revenues then remaining unexpended in the hands of the Trustee (except moneys, securities, funds or Revenues deposited or pledged, or required by the terms of the Bond Ordinance to be deposited or pledged, with the Trustee), and thereupon the Authority and the Trustee shall be restored, respectively to their former positions and rights under the Bond Ordinance, and all Revenues shall thereafter be applied as provided in the provisions of the Bond Ordinance governing the establishment and use of Funds and Accounts. No such payment over to the Authority by the Trustee or resumption of the application of Revenues as so provided shall extend to or affect any subsequent default under the Bond Ordinance or impair any right consequent thereon.

Bondholder's Direction of Proceedings

Anything in the Bond Ordinance to the contrary notwithstanding, following and during the continuation of an Event of Default only, subject to the last sentence of this paragraph, the Holders of not less than 20% in principal amount of the Bonds then Outstanding shall have the right, by an instrument or concurrent instruments in writing executed and delivered to the Trustee, to direct the method of conducting all remedial proceedings to be taken by the Trustee hereunder subject to the right of the Trustee to indemnification for fees, charges, costs, expenses and liabilities prior to exercising any remedy, and provided that such direction shall not be otherwise than in accordance with law or the provisions of the Bond Ordinance, and that the Trustee shall have the right to decline to follow any such direction which in the opinion of the Trustee would be unjustly prejudicial to Holders of Bonds not parties to such direction. If conflicting or inconsistent directions are received from more than one group of such Holders, each satisfying such 20% criterion, the Trustee shall be entitled to rely upon the direction given by the Holders with the largest percentage in aggregate principal amount of Bonds then Outstanding.

Responsibilities of Trustee

Prior to an Event of Default, the Trustee shall have the obligation to perform such express duties and only such express duties as are provided for in the Bond Ordinance, including any Series Ordinance

or Supplemental Ordinance, and no implied covenants or obligations shall be read into the Bond Ordinance against the Trustee.

The permissive right of the Trustee to do things enumerated in the Bond Ordinance shall not be construed as a duty, and the Trustee, except for its gross negligence or willful misconduct, shall not be liable for (i) any loss or damage whatsoever arising out of any action or failure to act in connection with its obligations under the Bond Ordinance or for (ii) the exercise of any discretion or power hereunder, or mistake of judgment, or otherwise. The Trustee shall be under no obligation to institute any suit, or to undertake any proceeding under the Bond Ordinance, or to enter any appearance or in any way defend in any suit in which it may be made defendant, or to take any steps in the execution of the trusts created under the Bond Ordinance or in the enforcement of any rights and powers hereunder, until it shall be indemnified, to the extent permitted by applicable law, to its satisfaction against any and all reasonable costs and expenses, outlays and counsel fees and other anticipated disbursements, and against all liability except to the extent determined by a court of competent jurisdiction to have been caused solely by its own gross negligence or willful misconduct. Nevertheless, the Trustee may begin suit, or appear in and defend suit or do anything else in its judgment proper to be done by it as the Trustee, without indemnity, and in such case the Trustee shall, to the extent not reimbursed by the Authority, reimburse itself from the monies available in the Surplus Fund under the Bond Ordinance for all costs and expenses, outlays and counsel fees and expenses and other reasonable disbursements properly incurred in connection therewith.

The Trustee shall be under no obligation or duty to perform any act under the Bond Ordinance or defend any suit unless indemnified (other than by the Authority) to its reasonable satisfaction for the reimbursement of all fees, costs and expenses to which it may be put and to protect it against all liability, except liability that is adjudicated to have resulted from its own gross negligence or willful misconduct in connection with any action so taken.

Upon the occurrence of an Event of Default and during the continuance of an Event of Default (which has not been cured or waived) the Trustee shall exercise such of the rights and powers vested in it by the Bond Ordinance and shall use the same degree of care and skill in the exercise or use as an ordinarily prudent trustee under a corporate indenture would exercise or use under the circumstances in the conduct of its own affairs.

Resignation and Removal of Trustee

The Trustee may resign by giving written notice to the Authority and mailing notice thereof by first class mail to each registered Bondholder as shown by the registration books held by the Trustee, and such resignation shall take effect upon the day that a successor shall have been appointed as provided under “Appointment of and Transfer to Successor Trustee” below.

The Trustee shall be removed by the Authority at any time on 30 days’ prior written notice if so requested by an instrument or concurrent instruments in writing, filed with the Trustee and the Authority, and signed by the Holders of not less than 51% of the principal amount of the Outstanding Bonds or their attorneys-in-fact duly authorized, excluding any Bonds held by or for the account of the Authority. The Authority may remove the Trustee at any time, except during the existence of any Event of Default, in the sole discretion of the Authority, by filing with the Trustee an instrument to such effect signed by the Treasurer of the Authority. Any such removal of the Trustee shall take effect upon the day that a successor shall have been appointed as provided under “Appointment of and Transfer to Successor Trustee” below.

Appointment of and Transfer to Successor Trustee

If the Trustee shall resign or shall be removed or shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or if a receiver, liquidator or conservator of the Trustee, or of its property, shall be appointed, or if any public officer shall take charge or control of the Trustee, or of its property or affairs, the Authority covenants and agrees that the GLWA Board will thereupon appoint a successor Trustee which shall be a bank or trust company authorized to do business in the State having a capital and surplus aggregating at least \$50,000,000 and which shall accept and agree to perform the trusts imposed upon it by the Bond Ordinance by depositing with the Authority and the predecessor Trustee a written instrument of acceptance. If no successor Trustee is appointed by the GLWA Board within 60 days after the Trustee's giving of written notice of resignation to the Authority or the Authority's giving of written notice of removal, any Bondholder or the resigning party may apply to any court of competent jurisdiction to appoint a successor Trustee. Such court may, after such notice appoint a successor Trustee in accordance with the requirements of the preceding sentence. The GLWA Board (or the appointing court) shall mail notice of any such appointment made by it by first class mail to each registered Bondholder within 20 days after such appointment.

The Trustee ceasing to act shall, upon receiving payment of all of its uncontested fees, costs and expenses, execute, acknowledge and deliver such instruments of conveyance and further assurance and do such other things as may reasonably be required for more fully and certainly vesting and confirming in such successor Trustee all the right, title and interest of the predecessor Trustee in and to any property held by it under the Bond Ordinance and shall pay over, assign and deliver to the successor Trustee any money or other property subject to the trusts and conditions herein set forth.

Discharge of Lien

Discharge of Lien of Pledged Assets

Upon the defeasance (as described below) of a Series of Senior Lien Bonds or Junior Lien Bonds, and payment of the Trustee's fees, costs and expenses related thereto, the lien of the Bond Ordinance upon the Pledged Assets with respect to such Series of Senior Lien Bonds or Junior Lien Bonds shall cease, terminate and be void.

Upon the defeasance of all Outstanding Bonds, the lien of the Bond Ordinance upon the Pledged Assets shall cease, terminate and be void and thereupon the Trustee, upon determining that all conditions precedent to the satisfaction and discharge of the Bond Ordinance have been complied with, and upon payment of the Trustee's fees, costs and expenses hereunder, shall (i) cancel and discharge the Ordinance and the lien on Pledged Assets, (ii) execute and deliver to the Authority such instruments in writing as shall be required to cancel and discharge the Bond Ordinance and the lien on Pledged Assets, (iii) reconvey to the Authority the Pledged Assets, and (iv) assign and deliver to the Authority so much of the Pledged Assets as may be in its possession or subject to its control, except, in the event of a defeasance of a Series of Bonds, moneys and Government Obligations held in the related Bond Interest and Redemption Funds, Debt Service Accounts, and Reserve Accounts for the purpose of paying such Series of Bonds; provided, however, such cancellation and discharge of the Bond Ordinance shall not terminate the powers and rights granted to the Trustee with respect to the payment, transfer and exchange of Bonds; and, provided, further, that the rights of the Trustee to indemnity and payment of all reasonable fees and expenses shall survive.

Defeasance of Bonds

Bonds are "defeased" and a "defeasance" has occurred for purposes of the Bond Ordinance if:

(1) there has been deposited in trust sufficient cash and Sufficient Government Obligations, not callable by the issuer, the principal of and interest on which mature at the time and in the amounts, without the reinvestment thereof, necessary to pay principal of and interest on such Bonds to its maturity, or, if called for redemption, to the date fixed for redemption, together with the amount of the redemption premium, if any, provided, however, that the sufficiency of the deposit to effectuate the defeasance of a Bond shall have been verified by a nationally recognized accounting firm or verification agent; and

(2) if such Bonds are to be redeemed prior to maturity, irrevocable instruments have been given to the Trustee, acting as a transfer agent, to call such Bonds for redemption.

A Series Ordinance may be delivered to the Trustee with respect to a Series of Bonds which may:

(1) provide different means of defeasing such Series of Bonds, and such means may be in addition to or in lieu of the means set forth above;

(2) provide for Permitted Investments for the defeasance of such Bonds, but no such Permitted Investments may thereafter be changed except as provided herein; and

(3) provide for the consequences of such Bonds being defeased.

Except as otherwise provided in a Series Ordinance:

(1) cash or Government Obligations for the defeasance of such Bonds are the Permitted Investments therefor; and

(2) the statutory lien herein granted pursuant to Act 94 shall be terminated with respect to defeased Bonds, the Holders of such defeased Bonds shall have no further rights under the Bond Ordinance except for payment from the deposited funds and registration and replacement of such Bonds, and such Bonds shall no longer be considered to be Outstanding under the Bond Ordinance.

Amendments without Consent

The Authority may, without the consent of the Bondholders, but with the prior written consent of the Trustee in case the Series Ordinance or Supplemental Ordinance changes any of the Trustee's duties under the Bond Ordinance, and where required by a Credit Facility, the consent of the related Credit Entity, adopt at any time or from time to time Series Ordinances or Supplemental Ordinances for any one or more of following purposes, and any Series Ordinance or Supplemental Ordinance shall become effective in accordance with its terms upon the filing with the Trustee of a copy thereof certified by the Authorized Officer:

(1) To provide for the issuance of a Series of Bonds and to prescribe the terms and conditions pursuant to which such Bonds may be issued, paid or redeemed;

(2) To add additional covenants and agreements of the Authority for the purpose of further securing the payment of the Bonds, provided such additional covenants and agreements are not contrary to or inconsistent with the covenants and agreements of the Authority contained in the Bond Ordinance;

(3) To prescribe further limitations and restrictions upon the issuance of Bonds and the incurring of indebtedness by the Authority which are not contrary to or inconsistent with the limitations and restrictions thereon theretofore in effect;

(4) To surrender any right, power or privilege reserved to or conferred upon the Authority by terms of the Bond Ordinance;

(5) To confirm as further assurance any security created under and subject to any lien or claim created or to be created by the provisions of the Bond Ordinance;

(6) To modify the provisions of the Bond Ordinance or any previously adopted Series Ordinance to permit compliance with changes in federal tax law which is required to maintain the tax exempt status of the Tax-Exempt Bonds;

(7) With the consent of the Trustee in reliance upon an opinion of Bond Counsel, to cure any ambiguity or defect or inconsistent provision in the Bond Ordinance or to insert such provisions clarifying matters or questions arising under the Bond Ordinance as are necessary or desirable in the event any such modifications are not contrary to or inconsistent with the Bond Ordinance as theretofore in effect;

(8) To comply with the Trust Indenture Act of 1939; or

(9) To amend or supplement the Bond Ordinance in any respect with regard to Bonds of one or more Priorities of Lien so long as such amendment does not materially adversely affect the Holders of Outstanding Bonds.

No Holders of Bonds of a Priority of Lien shall be “materially adversely affected” for the purposes of the Bond Ordinance by the change of any coverage percentage established for Bonds of any other Priority of Lien, and no amendment of or supplement to this Ordinance that provides for or facilitates the issuance of Bonds of any Priority of Lien shall “materially adversely affect” the Holders of Bonds of any other Priority of Lien for the purposes of this Ordinance so long as such amendment does not change any coverage percentage established for such Priority of Lien or is not an amendment that requires the consent of the Holders of such Bonds as described under “Amendments with Consent” below.

Notice of the adoption and delivery of any Supplemental Ordinance or resolution and a copy thereof shall be filed by the Trustee with the Rating Agency at the time of such adoption and delivery.

Amendments with Consent

Exclusive of Supplemental Ordinances under “Amendments without Consent” above, the Holders of at least 51% of the principal amount of Outstanding Bonds affected by the proposed Supplemental Ordinance and when required by of a Credit Facility, the related Credit Entity, shall have the right to consent to and approve the adoption by the Authority of other Supplemental Ordinances; provided, however, that nothing contained in this Article shall permit or be construed as permitting the following actions without the following consents: (i) an extension of the maturity of the principal of, or mandatory redemption date of, or the interest on any Bond, except upon the consent of the Holders of 100% of the principal amount of Bonds being affected thereby, (ii) a reduction in the principal amount of, or the premium or rate of interest on any Bond, except upon the consent of the Holders of 100% of the principal amount of all Bonds being affected thereby, (iii) modification of the privilege or priority of any Senior Lien Bond or Bonds over any other Senior Lien Bonds, except upon the written consent of the

Holders of 100% of the principal amount of the Senior Lien Bonds Outstanding or (iv) modification of the privilege or priority of any Junior Lien Bond or Junior Lien Bonds of a Priority of Lien over any other Junior Lien Bonds of a different Priority of Lien, except upon the written consent of the Holders of 100% of the principal amount of Junior Lien Bonds Outstanding. For the purposes of obtaining the foregoing consents, a Credit Entity shall be deemed to be the Holder of Senior Lien Bonds or Junior Lien Bonds pledged by the Authority to the Credit Entity or owned by the Credit Entity or Senior Lien Bonds or Junior Lien Bonds secured by a Credit Facility except to the extent the Credit Entity has not honored a draw on its Credit Facility which draw complies with the requirements of the Credit Facility.

The Trustee shall give written notice of the proposed adoption of a Supplemental Ordinance by mail to the registered addresses of Holders of the Outstanding Bonds and to the Credit Entity. Such notice shall briefly set forth the nature of the proposed Supplemental Ordinance and shall state that copies thereof are on file at the designated trust office of the Trustee for inspection by Holders of Bonds. If, within 60 days or such longer period as shall be prescribed by the Trustee at the written direction of an Authorized Officer following the mailing of such notice, the Holders of not less than the required percent of the principal amount of the Senior Lien Bonds and Junior Lien Bonds Outstanding by instruments filed with the Trustee shall have consented to the adoption thereof and any other prerequisites such as the approval of any Credit Entity having such right, such Supplemental Ordinance may be adopted and the Bond Ordinance shall be deemed to be modified and amended in accordance therewith.

Anything in the Bond Ordinance to the contrary notwithstanding, a Supplemental Ordinance which affects the rights, duties and obligations of the Trustee shall not become effective unless and until the Trustee shall have consented in writing in the case of the Trustee, to the adoption of such Supplemental Ordinance and unless the Authority has first obtained the approval of the State Department of Treasury if such approval is required.

Proposed Amendments to Bond Ordinance; Effective Date

The 2016 Series Ordinance contains certain proposed amendments to the Bond Ordinance that, following approval by Bondholders as described below under “Effective Date of Amendments,” amend the definition of “Reserve Requirement” and provide GLWA with the ability to reduce or eliminate the amounts required to be on deposit in the Senior Lien Bond Reserve Account and the Second Lien Bond Reserve Account, respectively.

Proposed Amendments

The following sentence is proposed to be added at the end of the definition of “Reserve Requirement” in the Bond Ordinance:

“Notwithstanding the foregoing, (i) in the case of Senior Lien Bonds secured by the Senior Lien Bond Reserve Account, upon satisfaction of the conditions set forth in Section 506(e) of this Ordinance, the Reserve Requirement for all Outstanding Senior Lien Bonds secured by the Senior Lien Bond Reserve Account, regardless of when issued, at the election of the Authority set forth in a written notice to the Trustee, may be reduced or eliminated, and if reduced, the reduced Reserve Requirement in no event to be in excess of the maximum permitted by the Code, and (ii) in the case of Second Lien Bonds secured by the Second Lien Bond Reserve Account, upon the satisfaction of the conditions set forth in Section 506(f) of this Ordinance, the Reserve Requirement for all Outstanding Second Lien Bonds secured by the Second Lien Bond Reserve Account, regardless of when issued, at the election of the Authority set forth in a written notice to the Trustee, may be reduced or eliminated, and if reduced, the reduced Reserve Requirement in no event to be in excess of the maximum permitted by the Code.”

The following new subsection (e) is proposed to be added to Section 506 of the Bond Ordinance:

“(e) The Authority may elect to reduce or eliminate the Reserve Requirement for all Outstanding Senior Lien Bonds secured by the Senior Lien Bond Reserve Account in accordance with the last sentence of the definition of Reserve Requirement in Section 101 at such time as the Authority shall have provided evidence to the Trustee that the Senior Lien Bonds are rated at least Aa3, AA- or AA- by at least two of Moody’s, S&P, and Fitch, respectively, and that neither of such ratings will be reduced solely as a result of the change in the Reserve Requirement for such Senior Lien Bonds. Such election shall be set forth in a written notice to the Trustee and shall be effective on the date of delivery of such notice to the Trustee. Following such election by the Authority, notwithstanding any other provision of this Ordinance, amounts on deposit in the Senior Lien Bond Reserve Account in excess of the Reserve Requirement for the Outstanding Senior Lien Bonds secured by the Senior Lien Bond Reserve Account shall be transferred by the Trustee into the Senior Lien Debt Service Account, the Receiving Fund and/or the Surplus Fund, as directed by the Authority.”

The following new subsection (f) is proposed to be added to Section 506 of the Bond Ordinance:

“(f) The Authority may elect to reduce or eliminate the Reserve Requirement for all Outstanding Second Lien Bonds secured by the Second Lien Bond Reserve Account in accordance with the last sentence of the definition of Reserve Requirement in Section 101 at such time as the Authority shall have provided evidence to the Trustee that the Senior Lien Bonds are rated at least Aa3, AA- or AA- by at least two of Moody’s, S&P, and Fitch, respectively, and that neither of such ratings will be reduced solely as a result of the change in the Reserve Requirement for such Second Lien Bonds. Such election shall be set forth in a written notice to the Trustee and shall be effective on the date of delivery of such notice to the Trustee. Following such election by the Authority, notwithstanding any other provision of this Ordinance, amounts on deposit in the Second Lien Bond Reserve Account in excess of the Reserve Requirement for the Outstanding Second Lien Bonds secured by the Second Lien Bond Reserve Account shall be transferred by the Trustee into the Second Lien Debt Service Account, the Receiving Fund and/or the Surplus Fund, as directed by the Authority.”

Effective Date of Amendments

Pursuant to the Bond Ordinance, the amendments set forth above shall become effective only upon, (1) in the case of Senior Lien Bonds secured by the Senior Lien Bond Reserve Account, the consent or deemed consent (by purchasing such Senior Lien Bonds after the date of the 2016 Series Ordinance where the offering document with respect to such Bonds contains a description of the amendments in the first two paragraphs under “Proposed Amendments” above) of the Holders of at least 51% of such Outstanding Senior Lien Bonds, and (2) in the case of Second Lien Bonds secured by the Second Lien Bond Reserve Account, the consent or deemed consent (by purchasing such Second Lien Bonds after the date of the 2016 Series Ordinance where the offering document with respect to such Bonds contains a description of the amendments in the first and third paragraphs under “Proposed Amendments” above) of the Holders of at least 51% of such Outstanding Second Lien Bonds,.

BY PURCHASING SERIES 2016 BONDS, EACH PURCHASER IS CONSENTING TO THE AMENDMENTS AS DESCRIBED ABOVE.

APPENDIX VII SUMMARY OF THE WATER AND SEWER SERVICES AGREEMENT

This summary does not purport to be comprehensive or definitive and is subject to all of the terms of the Water and Sewer Services Agreement, to which reference is hereby made and copies of which are available on GLWA's website at www.glwater.org or from the Underwriters prior to the execution and delivery of the Series 2016 Bonds and thereafter may be examined or obtained at the expense of the person requesting the same at the corporate trust office of the Trustee.

General

The City and the Authority (the "Parties") entered into the Water and Sewer Services Agreement on June 12, 2015. Pursuant to the Water and Sewer Services Agreement, the Authority will provide water to the Detroit Local Water Facilities ("Water Services") and will collect, carry, separate, treat and dispose of both sewage and water runoff from the Detroit Local Sewer Facilities to the Regional Sewer System ("Sewer Services"), all as more fully provided therein. Additionally, the Water and Sewer Services Agreement establishes and defines the scope of the agency relationship between the City and the Authority with respect to the development of rates and the billing, collection and enforcement of charges for the provision of Water Services and Sewer Services to Retail Customers, as described below.

Definitions

In addition to terms defined elsewhere in this Official Statement, the following terms shall have the following meanings:

"Authority Bonds" means bonds or other evidences of indebtedness assumed by the Authority under the Leases and related Bond Ordinance or issued by the Authority under the related Bond Ordinance pursuant to Act 94 and secured by a pledge of and statutory lien upon the Net Revenues (as that term is defined in the related Bond Ordinance) of the related System.

"*Detroit Local Systems*" means, collectively, the Local Water System and the Local Sewer System.

"Green Infrastructure" means an array of products, technologies and practices that use natural systems or engineering systems that mimic natural process by using soils and vegetation to remove storm water from the Sewer System as components of a storm water management system, which systems may include by are not limited to green roofs, porous pavement, rain gardens and vegetated swales.

"Green Infrastructure Program" means implementation of Green Infrastructure to remove storm water from the Sewer System and expenditure of the average annual requirement as required by the Wastewater Treatment NPDES Permit.

"Master Bond Ordinance" means, individually or collectively, as the context requires, the ordinance adopted by the Authority prior to the Effective Date for each System, setting forth the terms and provisions under which Authority Bonds may be assumed or issued.

Water Services

The Authority shall provide Water Services in amounts sufficient to meet the requirements of the Water and Sewer Services Agreement and in compliance with the technical and other requirements as

provided in the Water and Sewer Services Agreement. The City agrees to remit payment for all Water Services provided by the Authority at such rates as the Authority may establish, but only from amounts billed to and collected from Retail Customers. The City shall act as agent for the Authority as described below with respect to the development of rates, and billing and collecting and enforcing the collection of fees and charges from Retail Customers for Water Services. The City shall establish rates consistent with Applicable Laws that are reasonably projected to meet the revenue requirement the Authority establishes for Retail Customers as well as other costs of the Local Water System; provided that:

(i) rates established by the Authority shall be reasonable in relation to the costs incurred by the Authority for the supply of water;

(ii) the Authority shall not establish a revenue requirement for Retail Customers for the 2015-2016 Fiscal Year in an amount exceeding the revenue requirement established by DWSD for that period; and

(iii) each year, the Authority shall reflect in the revenue requirement a credit for the Retail Customers located in the City in the amount of \$20,700,000 against the portion of the Authority's revenue requirements allocated to the City, representing the return on equity to the City for the Water System in recognition of the City's ownership of the Water System and support of the rate structure for the Water System.

Measurement of City Usage. Annual volume and demands (used interchangeably as Units of Service) of the Local Water System on the Regional Water System will be estimated based on a combination of retail automated meter sales data and estimated sales data for non-automated meter customers, other Prudent Utility Practices measurement techniques, as well as all sources of non-revenue water. To the extent that all or a portion of water sales to the Local Water System becomes measured by master meters, the general approach may be modified.

Authority Usage. Until such time as the Leased Facilities are completely master metered, the Parties shall use the best available data and Prudent Utility Practices to develop Leased Facility annual volumes and maximum flow rates. Water usage by the Authority in the Leased Facilities connected to and receiving water service from the Local Water System shall be accounted for by applying applicable Prudent Utility Practices, including metering where feasible, and where not metered subject to the quarterly review and concurrence by the City and the Authority. Such usage may be excluded from any calculations used to determine the annual purchase volumes, maximum day demands or peak hour demands for Water Services to Retail Customers from the Authority.

Water Treatment Production Metering. The Authority shall complete the metering improvements specified in the Fiscal Year 2016 Water Supply System Capital Improvement Program, Fiscal Years 2016-2020, approved on March 1, 2015 by the Board of Water Commissioners, for the Northeast, Springwells, and Waterworks Park water treatment facilities no later than June 30, 2020. The Authority shall include in a future Authority CIP adequate means of measuring Authority consumption of water at other Regional Water Facilities.

Rate Methodology. The Authority shall adopt, and may amend from time to time, a methodology for ratemaking for the sale of water detailed in the Water and Sewer Services Agreement that complies with Michigan law. The Authority shall provide the City a description of such methodology and any amendment thereto in a form that complies with the provisions of the Water and Sewer Services Agreement and accounts for differences attributable to the Water and Sewer Services Agreement and the Leases. The Authority shall provide the City any update to its methodology within twenty (20) business days of its adoption by the GLWA Board.

Lease Payments. The Authority shall apply any portion of the Lease Payments directed by the City to debt service on Authority Bonds to the water revenue requirement established for the City and incorporate in its budget any portion of the Lease Payments directed by the City to the Detroit Local Account in the Water Improvement and Extension Fund.

Operation of Local Water System. The City shall repair, maintain, improve and operate the Local Water System in compliance with all Applicable Laws and the requirements of governmental and quasi-governmental permits issued with respect to the Local Water System or that are generally applicable to the Local Water System. Except to the extent caused by an act or omission of the Authority, the City shall be solely responsible for any noncompliance by the Local Water System with any of the foregoing, including the correction of the noncompliance and the payment of the costs thereof, and for the payment of any related fines, penalties, costs, losses or damages related thereto.

Sewer Services

The Authority shall provide Sewer Services to the Retail Customers in amounts sufficient and in compliance with other technical requirements as described in the Water and Sewer Services Agreement. The City agrees to remit payment for all Sewer Services provided by the Authority at such rates as the Authority may establish, but only from amounts billed to and collected from Retail Customers. The City shall act and is hereby appointed as agent for the Authority with respect to the development of rates for, and billing and collecting and enforcing the collection of fees and charges from the Retail Customers for Sewer Services. The City shall establish rates consistent with Applicable Laws that are reasonably projected to meet the revenue requirement the Authority establishes for Retail Customers, as well as other costs of the Local Sewer System; provided that:

- (i) rates established by the Authority consistent with the Water and Sewer Services Agreement shall be reasonable in relation to the costs incurred by the Authority for the supply of Sewer Services; and
- (ii) the Authority shall not establish a revenue requirement for the 2015-2016 Fiscal Year in an amount exceeding the amount currently in effect as established by DWSD for that period; and
- (iii) each year, the Authority shall reflect in its rate structure for Sewer Services a credit for Retail Customers in the City in the amount of \$5,516,000 against the portion of the Authority's revenue requirements allocated to the City, representing the return on equity to the City for the Sewer System in recognition of the City's ownership of the Sewer System.

Rate Methodology. The Authority shall adopt, and may amend from time to time, the methodology for ratemaking for the sale of Sewer Services that complies with Applicable Laws. The current methodology utilized by DWSD prior to the Effective Date is identified in the Water and Sewer Services Agreement. The Authority shall provide the City any update to its methodology within twenty (20) business days of its adoption by the GLWA Board.

Lease Payments. The Authority shall apply any portion of the Lease Payments directed by the City to debt service on Authority Bonds to the sewer revenue requirement established for the City and incorporate in its budget any portion of the Lease Payments directed by the City to the Detroit Account in the Sewer Improvement and Extension Fund.

Authority Usage. Sewer Services used by the Authority in the operation of the Leased Facilities connected to and receiving sewer service from the Local Sewer System shall be accounted for by

applying applicable Prudent Utility Practices, including metering where applicable, and where not metered subject to the quarterly review and concurrence by the City and the Authority. Such usage shall be excluded from any calculations used to determine the City's cost for Sewer Services to Retail Customers from the Authority.

Operation of Local Sewer System. The City shall repair, maintain, improve and operate the Local Sewer System in compliance with all Applicable Laws and the requirements of governmental and quasi-governmental permits issued with respect to the Local Sewer System or that are generally applicable to the Local Sewer System, including without limitation the provisions of Wastewater Treatment NPDES Permit applicable to the Local Sewer System. Responsibilities for compliance with the Wastewater Treatment NPDES Permit shall be generally allocated as provided in the Water and Sewer Services Agreement. Except to the extent caused by an act or omission of the Authority, the City shall be solely responsible for any noncompliance by the Local Sewer System with any of the foregoing, including the correction of the noncompliance and the payment of the costs thereof, and for the payment of any related fines, penalties, costs, losses or damages related thereto.

Detroit Local System Usage. Until such time as the Detroit Local System is master metered, sewer usage by all Retail Customers connected to and receiving sewer service from the Detroit Local System shall be accounted for by Prudent Utility Practices including metering where applicable, and where not metered subject to the quarterly review and concurrence by the City and the Authority.

Notification of Rates and Charges

As soon as possible in the ratemaking process, the Authority shall provide information on proposed rates and charges and the draft data and information used in the calculation of the proposed rates in a format that will enable the City to assist in the ratemaking process. Not less than one hundred twenty (120) days prior to the effectiveness of any new rates, the Authority shall provide the City with written notice of the proposed rates and the underlying data used to calculate the rates. The Authority shall meet with the City to review the rates and the data.

License

Although the City has retained the right and responsibility to operate the Detroit Local Systems, it hereby grants the Authority the right to use the Detroit Local Systems for the Term of the Water and Sewer Services Agreement (coterminous with the Term of the Lease), in order to provide Water Services and Sewer Services to customers of the Regional Systems including Retail Customers.

Deposit of Revenues

Consistent with the assignment of Revenues contained in the Leases, the Authority and the City shall deposit or cause to be deposited all Revenues each receives or collects from the operation of the Systems into the Revenue Receipts Fund of the Authority or, where feasible, directly into the Receiving Fund for the related System. From the Revenue Receipts Fund, the Revenue Receipts Trustee, at the direction of the Authority, shall allocate and cause these funds to be deposited into the appropriate Receiving Fund.

As described under "Appointment and Termination of Agency" below, the City shall act as an agent of the Authority when collecting the portion of the Revenues derived from the provision of Water Services and Sewer Services to the Retail Customers, and the City shall hold such Revenues in trust for the exclusive benefit of the Authority until such funds are deposited into the Revenue Receipts Fund.

Application of Lease Payments

For Fiscal Year 2016, the City directed that \$2,327,026 of the Lease Payment for the Regional Water System and \$19,991,469 of the Lease Payment for the Regional Sewer System to be applied to common-to-all debt service for the related Authority Bonds. The balance of the Lease Payments for Fiscal Year 2016 was directed to be deposited to the Detroit Local System Account in the related Improvement and Extension Fund. For subsequent Fiscal Years, no later than May 1 each year the City shall provide to the Authority a written direction concerning the application of the Lease Payments to be paid by the Authority to the City for the next Fiscal Year (each a “Direction to Apply Lease Payment”). A Direction to Apply Lease Payment shall include direction as to the allocation of the full amount of the Lease Payment for that year, and may also reflect commitment of Lease Payments for future years to the payment of debt service on Authority Bonds, consistent with the Leases. The Direction to Apply Lease Payment shall direct the Authority to allocate and credit to the City identified portions of the Lease Payment for: (i) the payment of principal of and interest on that portion of the Authority Bonds issued to finance the cost of improvements to the Detroit Local Facilities; (ii) the payment of the City’s share of the principal of and interest on Authority Bonds issued to finance the cost of common-to-all improvements to the Leased Facilities; and (iii) the payment of the cost of improvements to and repairs of the Detroit Local Facilities. Upon receipt of the Direction to Apply Lease Payment from the City, the Authority shall ensure that the Lease Payments are allocated to Authority funds and accounts consistent with that direction, and shall honor any direction from the City to release to the City portions of the Lease Payment which are required to be deposited in the Detroit Local System Account in the Authority’s Improvement and Extension Fund to the City to be applied to Detroit Local System improvements. The Authority shall transfer such amounts to the designated Bond Funds and the Detroit Local System Account in the related Improvement and Extension Fund at the times specified in the Bond Ordinance.

To the extent any portion of the Lease Payments have not previously been encumbered, the City may amend a Direction to Apply Lease Payment at any time during each Fiscal Year, to pay debt service or to pay the cost of an executed contract for improvements to the Detroit Local Facilities. The City may not amend a Direction to Apply Lease Payment to redirect any portion of a Lease Payment previously committed by the City to pay debt service on outstanding Authority Bonds or an executed contract for improvements to the Detroit Local Facilities.

Appointment and Termination of Agency

The Authority appoints the City as its agent, and the City accepts such appointment as agent, to perform the services and undertake the duties, obligations and administrative functions described in the third sentence of the first paragraph under “Water Services” above, in the third sentence of the first paragraph under “Sewer Services” above, and in the second paragraph under “Deposit of Revenues” above on behalf and for the benefit of the Authority, in accordance with the terms of the Water and Sewer Services Agreement and Applicable Law. This appointment and the City’s acceptance thereof may not be revoked or terminated except in accordance with the express terms described under “Termination of Agency” below. Unless and until this agency relationship between the Authority and the City is revoked or terminated in whole or in part as described below, the City is authorized and empowered by the Authority to execute and deliver, in the name and on behalf of the Authority, any and all instruments, documents or notices necessary or appropriate in performing its role as agent of the Authority under the Water and Sewer Services Agreement. The Authority shall execute and deliver to the City such documents as have been prepared by the City for execution by the Authority and shall furnish the City with such other documents as may be in the Authority’s possession, in each case, as the City may determine to be necessary or appropriate to enable it to carry out and perform its duties, obligations and administrative functions under the Water and Sewer Services Agreement and Applicable Law. Upon the City’s written request, the Authority shall furnish the City with any powers of attorney or other

documents necessary or appropriate to enable the City to carry out and perform its duties, obligations and administrative functions hereunder. The City may perform its agency duties directly or through one or more third parties, provided that the City shall remain primarily responsible for the performance of such duties.

The City shall act in its capacity as agent for the Authority (and not in its own capacity as principal or otherwise) for the purposes described in the first paragraph under “Water Services” above, in the first paragraph under “Sewer Services” above and under “Deposit of Revenues” above. The Authority may revoke or terminate, in accordance with the procedures described under “Termination of Agency” below, its appointment of the City as agent for the Authority, if the City fails to perform its duties, obligations or administrative functions in accordance with and as described in the first paragraph under “Water Services” above, in the first paragraph under “Sewer Services” above and under the “Deposit of Revenues” above and, to the extent applicable, the Performance Standards and Applicable Law; and in particular by failing to:

- (i) Establish a two-year budget which includes the costs of performing the City’s agency responsibilities for the Detroit Local Systems under the Water and Sewer Services Agreement no later than April 23 of each year starting with Fiscal Year 2017;
 - (ii) Establish rates reasonably intended to meet the revenue requirements for the Water Services and Sewer Services for each Fiscal Year that will become effective no later than June 30 of the prior Fiscal Year;
 - (iii) Send bills to Retail Customers at least every other month;
 - (iv) Collect and enforce payment of bills consistent with the Performance Standards;
- and
- (v) Deposit Revenues as described under “Deposit of Revenues” above.

Termination of Agency. In the event the City fails to satisfy any of the requirements described in the immediately preceding paragraph at any time after attempting to resolve concerns as provided under “Dispute Resolution” below, the Authority may, but is not obligated or required to, revoke or terminate the agency of the City with respect to those requirements that the City has failed to carry out and perform (but the agency shall continue with respect to all other requirements), subject to prior compliance by the Authority with the exclusive procedures and remedies provided and described under “Remedies” and “Arbitration” below. If, pursuant to a decision of the Arbitration Panel as described under “Remedies” and “Arbitration” below, the Arbitration Panel determines that the City has failed to satisfy any of the requirements set forth in the immediately preceding paragraph, the Authority may perform each of those requirements that was not satisfied by the City in accordance with the Water and Sewer Services Agreement directly or through another appointed agent. The City may not resign or assign any of its responsibilities as described under this “Appointment and Termination of Agency” without the prior written consent of the Authority.

Standard of Performance

The Authority shall endeavor to perform, or cause to be performed, all Services required under the Water and Sewer Services Agreement in compliance with Prudent Utility Practices, but shall in no event perform the Services at a level of service below the Performance Standards.

Cooperation of Parties

The Parties shall cooperate reasonably with each other in connection with any steps required to be taken as part of their respective obligations under the Water and Sewer Services Agreement, and shall (i) furnish upon request to each other such information and data, including maps, which are reasonably accessible and would not cause the Party providing such information and data to violate the terms of any agreement to which it is subject at the time of the request; (ii) execute and deliver to each other such other documents; and (iii) do such other acts and things, all as the other Party may reasonably request that is necessary or convenient to effectuate the purposes of the Water and Sewer Services Agreement and the transactions contemplated thereby.

The Director of DWSD-R and the Chief Executive Officer of the Authority or their designees shall initially meet weekly or at such other interval as they shall reasonably agree to review data, information and processes relevant to the operation and management of the Systems, including capital improvements, the Authority CIP and the Local Water System CIP, maintenance and repairs, and any other issues arising out of the Leases or the Water and Sewer Services Agreement. Such meetings shall include a review of Service delivery and any other issues relevant to the Water and Sewer Services Agreement. The City and the Authority agree to develop plans and protocols for operational coordination, GIS coordination, hydraulic water and sewer modeling, fire hydrant removal coordination and asset identification.

The Parties agree and covenant to coordinate all efforts and undertakings under the Water and Sewer Services Agreement, including the implementation of the Local Water System CIP and the Authority CIP, with the goal of maximizing any economies of scale and achieving any other available financial and operational efficiencies from such coordination. The Parties shall develop a long-term plan for the installation of master meters and backflow prevention devices between the Detroit Local Water System and the Regional Water System to be implemented in connection with the implementation of the Local Water System CIP, recognizing that the installation of such meters may be implemented over a long period of time. Such plan shall provide for modifications to the Systems as part of replacement projects to facilitate metering implementation.

The City and the Authority shall confer at least annually to develop, coordinate and prioritize a schedule for financing components of the Authority CIP and the City CIP, including grant applications and prioritization of applications for financing through the Michigan Clean Water Revolving Loan Fund or the Drinking Water Revolving Loan Fund.

With respect to each permit issued in the names of both the Authority and the City, the Parties shall identify which Party state regulatory officials should contact regarding questions or enforcement matters and the Parties shall provide such contact information to the issuer of the permit. The Parties shall jointly or separately perform such functions under the Wastewater Treatment NPDES Permit as set forth in the Water and Sewer Services Agreement.

The Parties shall maintain a combined sewer overflow control plan which shall include protocols for the management of City and Authority facilities during wet weather events. The Parties recognize that (i) the City is served by a combined sewer overflow (“CSO”) system and that the rate of flow will vary greatly depending upon the rainfall magnitude and other climatological factors, and (ii) under certain conditions the Regional Sewer System will have insufficient capacity to handle all flow generated by the City. The Authority will continue to operate the Regional Sewer System in accordance with the current Michigan Department of Environmental Quality (“MDEQ”)-approved Wet Weather Operational Plan (the “Operational Plan”) to provide service to the City. In situations where the Operational Plan does not address a particular instance or issue, the Parties agree that the mutual goal of the Parties is to maximize

the treatment and disinfection of Flows (as defined in Exhibit B to the Water and Sewer Services Agreement). Review and modification of the Operational Plan may occur periodically as mutually agreed between the Parties, and approved by MDEQ. Such review and/or modification may occur as Sewer System improvements are implemented or adaptive management strategies are found to be effective and formalized. If changes to the Operational Plan are significant and result in increased capacity limits for Authority wholesale customers, an adjustment to the CSO cost allocation or other appropriate cost allocation may be considered.

To the extent the Wastewater Treatment NPDES Permit allows for and requires Green Infrastructure, the City shall be primarily responsible for performing the Green Infrastructure Program required by the Wastewater Treatment NPDES Permit, including achieving the wet weather flow removal goal and annual average expenditure requirement. The City also shall be primarily responsible for performing the elective Green Infrastructure elements of the Wastewater Treatment NPDES Permit. The City's responsibility shall be limited to projects in the City. Subject to the City's reasonable approval, the Authority may propose additional Green Infrastructure Projects on properties located in but not owned by the City to the extent the projects are demonstrated to provide cost effective reduction of wet weather flow into sewers. Subject to the Authority's reasonable approval, the City may apply any wet weather flow removed, and expenditure made, by any additional Green Infrastructure Projects performed by the Authority to meet the flow removal and annual expenditure requirements of the Wastewater Treatment NPDES Permit. In the event the City fails to implement any Green Infrastructure required under the Wastewater Treatment NPDES permit in the timeline provided in such permit, the Authority may implement Green Infrastructure Programs in the City in order to meet the permit requirements. In such event, the Authority shall give the City notice of its intent to implement Green Infrastructure in the City in the following Fiscal Year no later than the end of the each December after the Authority's review of the report provided to MDEQ in August of each year.

The Authority shall have the right to review and approve the City's construction plans for meter facilities at new water distribution points to be connected to the Leased Water Facilities, water mains sized twenty-four inches and larger, pump stations, reservoirs, water towers, and any other construction that will cross, or be within close proximity to, or have influence upon the Leased Water Facilities. The Authority's approval of construction plans shall be timely and shall not be unreasonably withheld.

City Budget; Local Water System CIP; Application of Lease Payments

Each year the City shall provide the Authority with: (i) the budget forecast for the Detroit Local Systems as described below; (ii) the budgets for the operation and maintenance and other funding requirements of the Detroit Local Systems (the "Detroit Local System Budgets") as described below; (iii) the Local Water System CIP as described below; and (iv) the Direction to Apply Lease Payment as described under "Application of Lease Payments" above. The Detroit Local System Budgets for Fiscal Year 2015-2016 shall be the portions of the DWSD Fiscal Year 2015-2016 budget adopted on March 11, 2015 by the Board of Water Commissioners allocated to the Local Water System and the Local Sewer System. The allocation of responsibilities and charges listed in the Service Delivery Schedules attached to the Shared Services Agreement between the Parties shall not alter the Detroit Local System Budgets for Fiscal Year 2015-2016. On the Effective Date, the Authority shall deposit into each of the WRAP Fund, the Budget Stabilization Fund for each System and the funds designated by the City for application of the Lease Payments for Fiscal Year 2016 an amount equal to the annual deposit required for such fund or Lease Payment for Fiscal Year 2016 divided by twelve, which shall be multiplied by the number of months already elapsed during such Fiscal Year.

Preliminary Budget Forecast. The City agrees to provide the Authority with a preliminary budget forecast for the Detroit Local Systems. Commencing with the Fiscal Year beginning July 1, 2016, the

City shall prepare and submit to the Authority on or before January 1 of each year, a preliminary two-year budget forecast for the Detroit Local Systems for the following two Fiscal Years that sets forth projected revenues and expenses for each such Fiscal Year. The preliminary budget forecast shall set forth the City's assumptions for at least that two-year period with respect to demand for Water Services and Sewer Services and the expected delinquency level for amounts billed to Retail Customers in the City. The preliminary forecast for each such Fiscal Years shall project revenues necessary to generate the sum of the projected expenses and revenue requirements for the Detroit Local Systems for such Fiscal Years (collectively, the "Local Revenue Requirement") and the City share of the Authority's revenue requirement, including without limitation the following:

- (i) the amounts reasonably necessary to fund all expenses of administration and operation and the expenses for maintenance as may be necessary to preserve the Detroit Local Systems in good repair and working order;
- (ii) the Detroit Local Systems' share of the common-to-all amounts required to fund the Lease Payments;
- (iii) the Detroit Local Systems' share of debt service on the portion of the Authority Bonds issued to finance capital improvements to the Regional Systems and the Detroit Local Systems not covered by Lease Payments;
- (iv) the amounts necessary to fund the Local Water System CIP or make deposits to the Detroit Local Improvement and Extension Account of the Improvement and Extension Funds in the applicable Bond Ordinance from Retail Revenues, a portion of the Lease Payments or bond proceeds;
- (v) the Detroit Local Systems' share of the (x) common-to-all portion of liability assumed by the Authority on behalf of DWSD as a result of the City's Plan of Adjustment, including costs of (A) debt service on the B Notes, (B) debt service on the C Notes, and (C) funding for the City's frozen General Retirement System pension plan, and (y) the portion of such liabilities associated with Detroit Local System employees;
- (vi) the amount necessary to be deposited to the WRAP Fund, which shall be equal to 0.5% of the base budgeted operating revenues for the Detroit Local Systems for such Fiscal Year;
- (vii) (y) for each of Fiscal Years 2016, 2017 and 2018, an amount equal to one-third of the Budget Stabilization Requirement; and (z) for subsequent Fiscal Years one-third of the amount necessary to assure that the Budget Stabilization Requirement will be on deposit in the Budget Stabilization Fund within three full Fiscal Years; and
- (viii) any other amount that the City may be required to pay to the Authority in order to satisfy its revenue requirement from the Authority for such Fiscal Years. If the Authority issues bonds or other debt to satisfy its portion of liability associated with the City's frozen General Retirement System pension plan, the City shall include its portion of the debt service thereon in the Detroit Local System Budgets.

The City shall prepare an impact statement with respect to any new, modifications for or other changes in program or activity levels and revenue requirements for the forecast period. The impact statement shall include an explanation of the rationale for the change and the financial impact of the change on current and future budgets. The City and the Authority agree to act in good faith and to meet to review the budget forecast and the assumptions therefore relating to demand for Water Service and

Sewer Service and delinquencies and any other significant assumptions. If City and Authority administrators are unable to resolve differences of opinion regarding the assumptions, then the Reconciliation Committee shall meet promptly for the purpose of reaching consensus.

Adopted Budget. No later than March 23 of each year, commencing March 23, 2016, the City shall develop, adopt and provide the Authority with a copy of the Detroit Local System Budgets for the following two Fiscal Years. The Detroit Local System Budgets shall identify the Local Revenue Requirement for each Local System and shall include for each such Fiscal Year, at a minimum:

(i) the amounts reasonably necessary to fund all expenses of administration and operation and the expenses for maintenance as may be necessary to preserve the Detroit Local Systems in good repair and working order;

(ii) the Detroit Local Systems' share of the common-to-all amounts required to fund the Lease Payments;

(iii) the Detroit Local Systems' share of debt service on the portion of the Authority Bonds issued to finance capital improvements to the Regional Systems and the Detroit Local Systems not covered by Lease Payments;

(iv) the amounts necessary to fund the Local Water System CIP or make deposits to the Detroit Local Improvement and Extension Account of the Improvement and Extension Funds in the applicable Bond Ordinance from Retail Revenues, a portion of the Lease Payments or bond proceeds;

(v) the Detroit Local Systems' share of the (x) common-to-all portion of liability assumed by the Authority on behalf of DWSD as a result of the City's Plan of Adjustment, including costs of (A) debt service on the B Notes, (B) debt service on the C Notes, and (C) funding for the City's frozen General Retirement System pension plan, and (y) the portion of such liabilities associated with Detroit Local System employees;

(vi) the amount necessary to be deposited to the WRAP Fund, which shall be equal to 0.5% of the base budgeted operating revenues for the Detroit Local Systems for such Fiscal Year;

(vii) (y) for each of Fiscal Years 2016, 2017 and 2018, an amount equal to one-third of the Budget Stabilization Requirement; and (z) for subsequent Fiscal Years one-third of the amount necessary to assure that the Budget Stabilization Requirement will be on deposit in the Budget Stabilization Fund within three full Fiscal Years; and

(viii) any other amount that the City may be required to pay to the Authority in order to satisfy its revenue requirement from the Authority for such Fiscal Years. If the Authority issues bonds or other debt to satisfy its portion of liability associated with the City's frozen General Retirement System pension plan, the City shall include its portion of the debt service thereon in the Detroit Local System Budgets.

Tracking. The City shall, within 45 days following the end of each fiscal quarter of each Fiscal Year, furnish to the Authority a comparison of actual revenues and expenses for such fiscal quarter against the budgeted amounts in each Detroit Local System Budget. If the Authority determines that for such fiscal quarter there is a significant unfavorable variance which is reasonably expected to have a negative effect on the Authority's budget with respect to revenues or any of the following expense categories: (i) compensation (including wages, salaries and fringe benefits), (ii) operation and

maintenance expenses and (iii) debt service, then the Reconciliation Committee (consisting of a member of the GLWA Board not appointed by the Mayor of the City, or his or her designee, and a member of the Board of Water Commissioners of the City, or his or her designee), shall meet promptly for the purpose of reviewing actions the City proposes to take to address such significant unfavorable variance. Following the meeting of the Reconciliation Committee, the City agrees to take actions to address any such significant unfavorable variance and to make appropriate adjustments to the related Detroit Local System Budget in the current and succeeding Fiscal Year. Favorable variances may be incorporated into the budget by following the same process. An impact statement shall be prepared for each such action, and the impact of any budget amendments shall be carried through, as appropriate, in budget forecasts for subsequent Fiscal Years. The Authority may draw on the Budget Stabilization Fund an amount equal to the amount by which actual bad debt expense of the Retail Customer class exceeds the budgeted bad debt expense for that class. At least quarterly, and in connection with the preparation of the annual audit for the Local Water System and the Local Sewer System, the chief financial officers of the Authority and DWSD-R shall determine whether a draw on the Budget Stabilization Fund is necessary. In the event the chief financial officers cannot reach agreement on whether a draw is necessary, the Reconciliation Committee shall promptly meet for the purpose of resolving such disagreement. Amounts on deposit in the Budget Stabilization Fund in excess of the Budget Stabilization Requirement for the following Fiscal Year based on audited financial statements shall be transferred to the Detroit Local Improvement and Extension Account of the Improvement and Extension Fund in the applicable Bond Ordinance.

Local Water System CIP. No later than February 1 of each year, the City shall develop and provide the Authority with a copy of its current Local Water System CIP for the Detroit Local Facilities. The Local Water System CIP shall include the capital improvements and estimate of the costs therefor which the City plans to undertake in the next Fiscal Year, and projected capital improvement projects and estimates for the five years following. At least three months prior to finalizing each Local Water System CIP and any modifications thereto, the City shall provide a copy of the proposed Local CIP to the Authority solely for the purpose of: (A) coordinating the Local Water System CIP and the Authority CIP to maximize economies of scale, minimize service disruptions and to achieve other efficiencies from a coordinated implementation effort, and (B) providing notice to the Authority of any financing requirements of the City for the Detroit Local Facilities to be satisfied from Lease Payments and/or the issuance of Authority Bonds or requests for collaboration on grant applications or other funding opportunities. Upon receipt of the adopted Local Water System CIP from the City, consistent with the fourth paragraph under “Cooperation of Parties” above, the Authority shall ensure that its financial planning and budgeting reflect the foregoing requirements.

The City agrees that, in conjunction with the implementation of the Local Water System CIP and consistent with the plan developed as described in the third paragraph under “Cooperation of Parties” above, it will install master water meters to measure consumption by the Detroit Local Water System and cross connection controls between the Detroit Local Water System and the Regional Water System.

Third Party Disputes

Each Party hereby agrees to reasonably assist the other Party in the event any disputes arise between any Party and any third party arising out of the operation and maintenance of the Systems. In the event of a dispute between the Authority or the City and any third party, the City and the Authority shall cooperate with each other to resolve and defend such dispute. Any disputes between the City and the Authority arising in connection with third party disputes as described in this paragraph shall be resolved as described under “Dispute Resolution” below.

System Operation Costs

Each year, each Party shall provide to the other Party information and data regarding its actual costs associated with providing Water Services and Sewer Services to its respective wholesale and Retail Customers for the following Fiscal Year to allow the other Party to establish the revenue requirements for the Systems.

First Response; Findings

The City shall be the first responder for unscheduled and/or emergency situations (e.g. main breaks, sinkholes, etc.) which may arise in those portions of the Systems' water transmission and distribution system and wastewater collection system within the City. The City shall promptly respond when necessary and work diligently to stabilize (e.g. notify miss-dig, throttle valves, install traffic control), using Prudent Utility Practices, the affected portion of the Systems, to protect public health and safety and minimize property damage, regardless of responsibility for that portion of the Systems. The City will notify the Authority, in accordance with established protocols, prior to taking actions beyond those necessary to stabilize the affected portion of the Systems. Each Party reserves the right to take over response actions to the extent that the action is related to an asset for which it has operating responsibility.

The Parties shall establish mutually agreeable and coordinated response protocols for unscheduled and/or emergency response situations and include the protocol in the Shared Services Agreement. In all cases where investigation and/or work is to be or has been performed by a Party, the responding staff of that Party is to respond promptly, take necessary actions in accordance with Prudent Utility Practices, standards, exercise due care, document the results of any investigation, and notify the other Party of all findings. Any disputes arising from such unscheduled and/or emergency repairs shall be resolved as described under "Disputes Arising from Physical, Technical and Mechanical Issues" below.

Defaults

Either Party shall be in default under the Water and Sewer Services Agreement if it fails to fully perform and comply with any of the terms, conditions or provisions of the Water and Sewer Services Agreement after it has received thirty (30) days' notice of such default, provided that if such failure cannot be remedied within such thirty (30) day cure period, the defaulting Party shall not be in default if it commits to remedy within the thirty (30) day cure period and diligently pursues the remedy to its completion.

Remedies

Upon default of the Authority, the City may, at its sole option and as its exclusive remedy, pursue any rights and remedies available to such Party at law or in equity under the Water and Sewer Services Agreement as determined in accordance with the dispute resolution procedures described under "Dispute Resolution," "Arbitration" and "Disputes Arising from Physical, Technical and Mechanical Issues" below, including specific performance; provided, that the City may not terminate the Water and Sewer Services Agreement.

Upon default of the City, the Authority may but is not required to: (i) terminate the agency described above under "Appointment and Termination of Agency" and exercise all rights granted to the City thereunder, which includes the power of the Authority to establish rates to be paid by the Retail Customers for the Services and to charge, bill and collect from the Retail Customers amounts due for the Services; and (ii) pursue all rights and remedies available to the Authority described under "Dispute Resolution," "Arbitration" and "Disputes Arising from Physical, Technical and Mechanical Issues"

below; provided, that the Authority may not terminate the Water and Sewer Services Agreement and shall continue to provide Water Services and Sewer Services as described under “Water Services” and “Sewer Services” above. The foregoing remedies are the exclusive remedies available upon a default for non-payment by the City.

Waiver

The failure of any Party to insist in any one instance upon strict performance by the other Party of its obligations under the Water and Sewer Services Agreement shall not constitute a waiver or relinquishment of any such obligations as to any other instances. No covenant or condition of the Water and Sewer Services Agreement may be waived by either Party except in a writing signed by that Party, and the forbearance or indulgence of that Party in any regard whatsoever and regardless of the duration of such forbearance or indulgence shall not constitute a waiver of the covenant, condition or obligation until performed or waived in writing, and that Party shall be entitled to invoke any remedy available to that Party under the Water and Sewer Services Agreement despite the forbearance or indulgence.

Dispute Resolution

The Authority and the City shall each designate in writing to the other from time to time a representative who shall be authorized to resolve any dispute relating to the subject matter of the Water and Sewer Services Agreement in an equitable manner and, unless otherwise expressly provided herein, to exercise the authority of such party to make decisions by mutual agreement.

The City and the Authority each agree (i) to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner and (ii) to provide each other with reasonable access during normal business hours to any and all non-privileged written records, information and data pertaining to any such dispute.

If any dispute relating to the subject matter of the Water and Sewer Services Agreement is not resolved between the City and the Authority as described under this “Dispute Resolution” within 30 days from the date on which a party provides written notice to the other party of such dispute and of the notifying party’s position on the disputed matter, then upon written notification by either party to the other party, such dispute shall be settled exclusively and finally by binding arbitration as described under “Arbitration” below.

During the pendency of any dispute and until such dispute is resolved the Parties shall continue to operate under the terms of the Water and Sewer Services Agreement.

Arbitration

It is specifically understood and agreed that any dispute or claim arising under or relating to the Water and Sewer Services Agreement that cannot be resolved between the City and the Authority, other than disputes arising under “Disputes Arising from Physical, Technical and Mechanical Issues” below, including any matter relating to the interpretation or performance of the Water and Sewer Services Agreement, shall be submitted to binding arbitration irrespective of either the magnitude thereof or the amount in dispute.

Each arbitration between the City and the Authority shall be conducted pursuant to the Uniform Arbitration Act, Act No. 371, Public Acts of Michigan, 2012 (“Act 371”).

The arbitration shall be conducted before a panel composed of three arbitrators (the “Arbitration Panel”). Each party shall appoint an arbitrator, obtain its appointee’s acceptance of such appointment and deliver written notification of such appointment and acceptance to the other party within 15 days after delivery of a notice of arbitration. The two arbitrators appointed by the City and the Authority shall jointly appoint the third (who shall be the chairperson), obtain the acceptance of such appointment and deliver written notification of such appointment within 15 days after their appointment and acceptance.

Any arbitration commenced hereunder shall be completed within 120 days after the appointment of the Arbitration Panel absent agreement of the City and the Authority to the contrary. Further, absent agreement of the City and the Authority or, upon request of one of the Parties, an order from the Arbitration Panel to the contrary: (i) all discovery shall be completed within 60 days after the appointment of the Arbitration Panel; (ii) each Party shall be limited to a maximum of 5 depositions; (iii) each deposition shall be completed within a maximum period of two consecutive 8-hour days; (iv) each Party shall be limited to 2 expert witnesses; and (v) interrogatories shall be limited to a maximum of 50 single issues without sub-parts. The City and the Authority waive any claim to any damages in the nature of punitive, exemplary or statutory damages in excess of compensatory damages or otherwise expressly provided for herein, and the Arbitration Panel is specifically divested of any power to award such damages. The Arbitration Panel shall have the power to award injunctive or other equitable relief. All decisions of the Arbitration Panel shall be pursuant to a majority vote. Any interim or final award shall be rendered by written decision.

If either the City or the Authority fails to appoint its arbitrator within 15 days after delivery of a notice of arbitration, or if the two arbitrators appointed cannot agree upon the third arbitrator within 15 days after appointment of the second arbitrator, then the required arbitrator(s) shall be appointed by the American Arbitration Association or as otherwise agreed by the City and the Authority.

No arbitrator shall be a past or present employee or agent of, or consultant or counsel to, either the City or the Authority or any affiliate of either the City or the Authority.

The Authority and the City shall each bear the out-of-pocket costs and expenses of their respective arbitrator, attorneys and witnesses, and they shall each bear one-half of the out-of-pocket costs and expenses of the chairperson of the Arbitration Panel and all administrative support for the arbitration.

Disputes Arising from Physical, Technical and Mechanical Issues

If any disputes arise between the City and the Authority regarding physical, technical or mechanical issues arising under the Water and Sewer Services Agreement (but specifically excluding any claims that may arise under Act 222, Public Acts of Michigan, 2001, as amended), including but not limited to the assignment of responsibility for breaks or failures of water and sewer pipes or other mechanical failures based on the operating control of the respective portion of the facilities, and the Parties do not resolve such dispute within fourteen days, or such other time mutually agreeable to the Parties, after the City or the Authority expresses its disagreement with the position of the other Party to such matters, a committee consisting of one officer (as well as such other employees with expertise in the particular area of dispute) of the Authority and one officer (as well as such other employees with expertise in the particular area of dispute) of the City shall meet and attempt in good faith to resolve such dispute. If such committee is unable to resolve such dispute within fourteen days, or such other time mutually agreeable to the Parties, following their initial meeting, then the Parties shall select a panel of three engineers with experience in the design, construction, or operation and maintenance of a water and sewer utility system in the same manner as the Arbitration Panel is selected as described in the third paragraph under “Arbitration” above (the “Engineer Panel”), and the Engineer Panel shall be designated to consider and decide the issues raised by such dispute unless both Parties determine that further

discussions by the committee are merited. The Engineer Panel shall be designated not later than the third day following the expiration of the second fourteen-day or other period described above, such designation to become effective on the third day following such designation. Within ten days after the designation of the Engineer Panel, the Authority and the City shall each submit to the Engineer Panel a notice (a "Technical Position Notice") setting forth in detail such Party's position in respect of the issues in dispute. Such notice shall include supporting documentation, if appropriate.

The Engineer Panel shall complete all proceedings and issue its decision with regard to the issues under dispute as promptly as reasonably possible, but in any event not later than ten days after the date on which both Technical Position Notices are submitted, unless the Engineer Panel reasonably determines that additional time is required in order to give adequate consideration to the issues raised. In such case, the Engineer Panel shall state in writing its reasons for believing that additional time is needed and shall specify the additional period required, which period shall not exceed ten days without the City's and the Authority's agreement.

In resolving a dispute under this section, the Engineer Panel shall consider all facts and circumstances the panel deems reasonable given the nature of the dispute.

The Engineer Panel shall choose either the City's position or the Authority's position as set forth in their respective Technical Position Notices or shall choose from each Party's Technical Position Notices the portions that are technically correct. If the Engineer Panel determines that the position set forth in the City's Technical Position Notice is correct, the panel shall so state and shall state the appropriate actions to be taken by the Authority. In such case, the Authority shall promptly take such actions. If the Engineer Panel determines that the position set forth in the Authority's Technical Position Notice is correct, the panel shall so state and shall state the appropriate actions to be taken by the City. In such case, the City shall promptly take such actions. If the Engineer Panel determines that a portion of the City's Technical Position Notice is correct and a portion of the Authority's Technical Position Notice is correct, the panel shall so state and shall state the appropriate actions to be taken by each respective Party. In such case, the respective Party shall promptly take such actions. The Engineer Panel may assign responsibility of the costs of repairs undertaken by a Party to the Party that is responsible for such water and sewer pipes. The decision of the Engineer Panel shall be final and non-appealable; provided that, any such decision may be treated as an arbitration award for purposes of enforcement.

The Authority and the City shall each bear the out-of-pocket costs and expenses of their respective engineer, attorneys and witnesses, and they shall each bear one-half of the out-of-pocket costs and expenses of the chairperson of the Engineer Panel and all administrative support for the arbitration.

Appeals of Arbitration Awards and Decisions

The City or the Authority may appeal an award or decision issued by the Arbitration Panel for the reasons set forth in Section 23 of Act 371 (MCL 691.1703).

Enforcement of Arbitration Awards and Decisions

The City or the Authority may enforce any awards or decisions of the Arbitration Panel or the Engineer Panel as described above pursuant to Section 22 of Act 371 (MCL 691.1702). The provisions of the Water and Sewer Services Agreement as described under "Dispute Resolution," "Arbitration" and "Disputes Arising from Physical, Technical and Mechanical Issues" above shall be the sole and exclusive remedy of the parties with respect to any claim or dispute, other than disputes arising under "Disputes Arising from Physical Technical and Mechanical Issues" described above. The City and the Authority agree not to bring, or cause to be brought, in a court of law any action, proceeding or cause of action

whatsoever with respect to any such claim or dispute, other than as necessary to enforce the award or decision of the Arbitration Panel or the Engineer Panel as described in this paragraph.

Amendments to Water and Sewer Services Agreement

The Water and Sewer Services Agreement may be amended only by written agreement executed and approved by both Parties, as applicable. Approval by the GLWA Board shall be by supermajority vote.

APPENDIX VIII
SUMMARY OF THE SHARED SERVICES AGREEMENT

This summary does not purport to be comprehensive or definitive and is subject to all of the terms of the Shared Services Agreement, to which reference is hereby made and copies of which are available on GLWA’s website at www.glwater.org or from the Underwriters prior to the execution and delivery of the Series 2016 Bonds and thereafter may be examined or obtained at the expense of the person requesting the same at the corporate trust office of the Trustee. Capitalized terms used in this appendix and not otherwise defined in this Official Statement shall have the meanings given to such terms in the Shared Services Agreement.

General

The City and the Authority entered into the Shared Services Agreement as of December 1, 2015 pursuant to which each party agreed to provide services to the other in connection with the management and operation of the Regional Water System and the Local Water System to avoid duplication of internal administrative and office functions. The Shared Services Agreement became effective on January 1, 2016.

Service Delivery Schedules

The City and the Authority have agreed that, to facilitate and enhance the efficiency of the operation of the Regional Systems by the Authority and the operation of the Local Systems by DWSD, and to increase the efficiency of operation of the Systems into the future, minimizing duplication of services and functions by both the Authority and the City, the City shall provide to the Authority the City Services for the periods described on the Service Delivery Schedules attached to the Shared Services Agreement and the Authority shall provide to the City the Authority Services for the periods described on the Service Delivery Schedules, commencing on the Effective Date, subject to periodic modification as to scope and duration as provided under “Modifications and Extensions of Service Delivery Schedules” below. Generally, the Performing Party for a particular Service will be the party that utilizes or requires the Service more than the Subscribing Party, unless such allocation of responsibility would result in a substantial increase in FTEs to the other Party. Each Service Delivery Schedule shall contain, at minimum, the following information:

- a) the Performing Party and the Subscribing Party;
- b) identification of the Service to be provided and how such Service shall be delivered;
- c) the period for which the Service is to be provided;
- d) the Service Cost, which, beginning no later than Fiscal Year 2017-2018, shall include a breakdown, where practicable, of each component of the Service Cost, and the charges therefor;
- e) a statement of any variations of the terms of this Agreement which may be reasonably necessary for the specific Service being performed;
- f) if necessary, a process for determining how such Services will be provided after an initial transition period; and

g) notice and other provisions, including Separation Costs, regarding the termination or modification of the Service under this Agreement.

The Parties may mutually agree to adopt new or modified Service Delivery Schedules as the need or desirability of such Services occurs or changes as described under “Modification or Extension of Service Delivery Schedules” below. The Director of DWSD (the “Director”) and the Chief Executive Officer or their assignees shall maintain and update as necessary a list of primary contacts from each Party for each Service Delivery Schedule. Each Party shall ensure that the appropriate employee or officer of that Party responsible for the provision or subscription of a specific Service is kept informed of the current contact list.

Except as otherwise provided in a Service Delivery Schedule, no Party shall be responsible for paying any Separation Costs.

Provision of Services

The Authority shall perform or cause to be performed the Authority Services as provided in each applicable Service Delivery Schedule. The Authority may perform the Services directly or contract with third parties to perform all or a portion of the Services on its behalf.

The City shall perform, or cause to be performed, the City Services as provided in each applicable Service Delivery Schedule. The City may perform the Services directly or contract with third parties to perform all or a portion of the Services on its behalf. The City Services may be provided on behalf of DWSD by the City’s central administration as an operation and maintenance expense to the extent the central administration has historically provided such services to DWSD.

In the event a Performing Party has contracted with a third party to perform all or a portion of the Services on its behalf, the provisions of this Agreement shall control in the event of a conflict between the provisions of such contract and this Agreement. Additionally, a Subscribing Party shall have the right to consent to the selection of any new third party contractor who will be providing all or a portion of Services on behalf of a Performing Party, which consent shall not be unreasonably withheld.

A Performing Party shall dedicate such resources as are necessary to ensure its officers, employees and contractors promptly respond to reasonable requests of the Subscribing Party in connection with the provision of Services. In the event a Subscribing Party requests information or support pursuant to the Shared Services Agreement or a Service Delivery Schedule to which a representative of the Providing Party fails to respond in a timely manner, the Director and the Chief Executive Officer and the appropriate employees or agents of each Party responsible for responding to the request shall meet within three business days to provide the response or establish a date certain for responding, as appropriate.

Modification or Extension of Service Delivery Schedules

Prior to the development of the DWSD budget for each Fiscal Year pursuant to the Water and Sewer Services Agreement, the Chief Executive Officer and the Director shall meet to discuss and plan for any modifications to the Service Delivery Schedules for the next Fiscal Year and the anticipated need and Service Costs for any “as-needed” Services for the next Fiscal Year based on actual results in prior Fiscal Years. Any proposed modification shall identify or project any Stranded Costs and Transition Costs calculated by applying the Service Cost cost-components. Except as otherwise provided in a Service Delivery Schedule, the expectation is that the effective date and expiration of each Service Delivery Schedule shall be coterminous with the Fiscal Year of the Parties.

The Chief Executive Officer and the Director may approve Service Delivery Schedules to share additional Services if the Service Cost will not exceed \$50,000 in a Fiscal Year, or otherwise with the approval of the GLWA Board and the Board of Water Commissioners. Any existing Service Delivery Schedule may be terminated other than by its terms, modified or extended by: (a) mutual agreement of the Chief Executive Officer and the Director if the Chief Executive Officer and the Director reasonably believe that the modified service arrangement will not result in an increase in the cost of acquiring such Service in excess of the greater of \$50,000 or 10% of the annual Service Cost, including any applicable Separation Costs; or (b) otherwise by approval of the GLWA Board and the Board of Water Commissioners. At least quarterly, the Chief Executive Officer shall provide to the GLWA Board and the Director shall provide to the Board of Water Commissioners a report including any modifications, extensions and terminations of existing Service Delivery Schedules.

Compliance with Procurement Policies and Procedures

The procurement of Services pursuant to the Shared Services Agreement by a Subscribing Party is not subject to the procurement policies and procedures of the Parties. In the event a Subscribing Party requires a Service from a Performing Party hereunder on an “as needed” basis, it may request such Service pursuant to this Agreement and the applicable Service Delivery Schedule according to the procedures agreed to by the Chief Executive Officer and the Director notwithstanding any procurement policies or procedures of the Subscribing Party then in effect.

Standard of Performance

A Performing Party shall endeavor to perform, or cause to be performed, all Services required under the Shared Services Agreement in compliance with Prudent Utility Practices, but shall in no event perform the Services at a level of service below the Performance Standards. The Parties shall endeavor to establish reasonable safeguards and internal controls to ensure the fiscal integrity of the operations and fiscal management of each Party with respect to the Services, including conducting criminal and credit background checks of each employee with access to any cash, information technology systems, or other assets of either Party.

Cooperation of Parties

The Parties shall cooperate reasonably with each other in connection with any steps required to be taken as part of their respective obligations under the Shared Services Agreement, the Water Lease, the Sewer Lease, the Water and Sewer Services Agreement, permits or any Applicable Laws, including the development of the capital improvement plans of each Party, financial planning and debt management, and shall (i) furnish upon request to each other such information, data and records, including maps, which are reasonably accessible and would not cause a Performing Party to violate the terms of any agreement to which it is subject at the time of the request or which are required to be disclosed pursuant to any agreements or Applicable Laws; (ii) execute and deliver to each other such other documents; (iii) provide such witness testimony, documents, records and other services or information within the possession or control of each Party necessary or desirable for the proper prosecution and/or defense of any current or future litigation affecting either Party, and (iv) do such other acts and things, all as the other Party may reasonably request that is necessary or convenient to effectuate the purposes of this Agreement and the transactions contemplated hereby.

The Director, the City and the Chief Executive Officer or their designees shall initially meet weekly or at such other interval as they shall reasonably agree or as specified in a particular Service Delivery Schedule, to review data, information and processes relevant to the provision of Services and any other issues arising out of this Agreement. Such meetings shall include a review of Service delivery,

potential Invoice Disputes as known, anticipated Service Delivery Schedule requests, including modifications, extensions or potential amendments, and any other issues relevant to this Agreement.

In the event the performance of a Service is going to be assumed by a Subscribing Party, the Parties and their employees shall reasonably cooperate and provide information and training to each other in order to ensure the seamless transfer of knowledge with respect to that Service.

When necessary or desirable, the Parties shall jointly develop operational protocols with respect to specific Services.

The City shall maintain a record and be the repository of all easements and other real property interests acquired by the Authority during the term of the Water Lease and the Sewer Lease. The Authority shall provide all original documents memorializing such easements and other real property interests to the City. The City shall take all actions necessary to record or otherwise perfect its interest in all easements or other real property interests acquired by it or the Authority during the term of the Water Lease and the Sewer Lease. The City shall provide the Authority access to and copies of any easements and other real property interests necessary for the performance of its rights and duties under this Agreement, the Water Lease, the Sewer Lease and the Water and Sewer Services Agreement.

Invoices; Payment Terms; Invoice Disputes

Invoices. For Fiscal Year 2015-2016, the City shall pay the Authority \$4,707,608 for all Authority Services (including “as-needed” Services) and the Authority shall pay the City \$2,179,506 for all City Services (including “as-needed” Services), each in equal monthly installments. Such installments received by the Authority shall be deposited into the Authority Regional Operation and Maintenance Account of the Operation and Maintenance Fund established in the master bond ordinances for each of the Systems, and such installments received by the City shall be deposited into the Detroit Local Operation and Maintenance Account of the Operation and Maintenance Fund established in the master bond ordinances for each of the Systems. Commencing no later than July 1, 2016, each Party shall provide the other Party one monthly invoice itemized by Service Delivery Schedule for Services provided other than for “as needed” Services, which shall be invoiced as described below under “As Needed and Other Hourly Services.”

The Parties shall engage, and share the costs of, a third-party to analyze the actual Service Costs (“Cost Analysis”) of providing the City Services and the Authority Services for Fiscal Year 2015-2016 and each subsequent Fiscal Year. If, based on this Cost Analysis: (a) the costs paid by a Subscribing Party were greater than the costs of providing the Services, the Providing Party shall pay an amount equal to such cost variance to the Subscribing Party in the next Fiscal Year or as otherwise agreed to by the Parties; and (b) the costs paid by a Subscribing Party were less than the costs of providing the Services, the Subscribing Party shall pay an amount equal to such cost variance to the Providing Party in the next Fiscal Year or as otherwise agreed to by the Parties. Additionally, Service Costs will not include costs of funding the Pension Obligation (as defined in each of the Leases), but shall be addressed as part of the process of preparing budgets for the Regional Systems and Local Systems as set forth in the Water and Sewer Services Agreement.

Each invoice, whether for Services provided regularly or “as-needed,” shall itemize the costs and charges by Services provided under each Service Delivery Schedule, and shall provide sufficient detail to the Subscribing Party to identify the Services performed and the basis for the charges. A Performing Party may only charge the Service Cost for Services provided. Neither Party may set-off any amount it owes to the other Party on account of any amounts it may be owed by such Party. Contract, material and other applicable Service Costs shall be billed at the contractual rates or third-party charges therefor.

Payment Terms. Payments for Services shall be payable monthly. Unless otherwise specified in a Service Delivery Schedule, payment of each invoice shall be due no later than thirty (30) days after the date of delivery of the Invoice, provided however, that in the event the City has not received its current monthly disbursement of operations and maintenance operating funds from the Authority pursuant to the Water and Sewer Services Agreement, its payment due date shall be five (5) business days after receipt of such funds (the “Payment Terms”).

Invoice Disputes. In the event a Subscribing Party disputes all or a portion of the amount billed under any invoice, it shall notify the Performing Party of such dispute (an “Invoice Dispute”) in writing within twenty (20) days of the date of receipt of the disputed invoice. Invoice Disputes shall be resolved as described under “Dispute Resolution” below.

The Subscribing Party shall pay the undisputed amount of any invoice pursuant to the Payment Terms. If the Invoice Dispute is not resolved by the date the payment on the disputed invoice is due, the Subscribing Party shall deposit the disputed amount into an escrow account to be held for the benefit of the Performing Party until the dispute is resolved.

Reconciliation. Beginning with Fiscal Year 2017-2018, the Performing Party shall reasonably calculate the Service Cost required to provide each Service during the next Fiscal Year, and shall notify the Subscribing Party of that Service Cost in sufficient time for the Subscribing Party to ensure the organization’s Fiscal Year budget is sufficient to pay such Service Costs. By December 1 of each year, a Performing Party shall provide to the other Party the Service Costs for each Service it expects to provide in the next Fiscal Year.

Beginning with the Fiscal Year 2017-2018, in the event a Performing Party incurs extraordinary and unanticipated Service Costs, the Chief Executive Officer and the Director shall meet within ten (10) business days to discuss any reconciliation or adjustments to the amounts paid by the Subscribing Party to ensure the payment of the Service Costs.

“As-needed” and Other Hourly Services. Commencing no later than July 1, 2016, for Services provided on an “as-needed” basis, the Performing Party shall exercise its best efforts to provide invoices within thirty (30) days after the end of each month for such Services performed during the immediately preceding month, with such invoices clearly marked as final if all “as needed” Services have been completed or marked as open if the “as needed” Services are still being performed. “As-needed” Services shall be billed on an hourly unit price basis, which shall be recorded and billed in quarter hour increments, comprising the Service Cost for such Services.

“As-needed” Services and other Services billed on hourly basis shall be recorded and billed in quarter hour increments, comprising the following Service Cost elements: salaries and fringe benefits; provided that, such hourly unit price shall be based on the annualized productive hours for the class of employee being billed. This amount shall be subject to the annual Cost Analysis reconciliation described under “Invoices” above.

Defaults

A Performing Party shall be in default under the Shared Services Agreement if it fails to perform any of the Services required of it thereunder in accordance with the Performance Standards after it has received thirty (30) days’ notice of such default, provided that if such failure cannot be remedied within such thirty (30) day cure period, the Performing Party shall not be in default if it commences to remedy the default within the 30 day cure period and diligently pursues the remedy to its completion pursuant to a

mutually agreeable action plan and schedule agreed to by the Director and the Chief Executive Officer or their assignees.

A Subscribing Party shall be in default under the Shared Services Agreement if it does not make the payments required, whether in whole or in part, pursuant to the Payment Terms and after resolution of any invoice dispute as described above.

Either Party shall be in default under the Shared Services Agreement if it fails to fully perform and comply with any of the other terms, conditions or provisions of the Shared Services Agreement not covered by the two immediately preceding paragraphs after it has received thirty (30) days' notice of such default, provided that if such failure cannot be remedied within such thirty (30) day cure period, the defaulting Party shall not be in default if it commits to remedy within the thirty (30) day cure period and diligently pursues the remedy to its completion pursuant to a mutually agreeable action plan and schedule agreed to by the Director and the Chief Executive Officer or their assignees.

Remedies

Upon default by a Performing Party, the Subscribing Party may (i) perform or cause a third party to perform such obligation of the Performing Party upon written notice to the Performing Party, and the Performing Party shall reimburse the non-defaulting Party for all reasonable increased costs incurred in such performance; and (ii) resolve the dispute as described under "Disputes, Resolution" below.

Upon default by a Subscribing Party, the Performing Party may, at its sole option: (i) provide written notice to the Subscribing Party of such default; and (ii) pursue all rights and remedies available to the Performing Party under the Shared Services Agreement.

Upon default of a Party as described in the third paragraph under "Defaults" above, the non-defaulting Party may, at its sole option, pursue any rights and remedies available to such Party under the Shared Services Agreement, including specific performance.

Waiver

The failure of any Party to insist in any one instance upon strict performance by the other Party of its obligations under the Shared Services Agreement shall not constitute a waiver or relinquishment of any such obligations as to any other instances, and the same shall continue in full force and effect. No covenant or condition of the Shared Services Agreement may be waived by either Party except by written consent of that Party, and forbearance or indulgence of that Party in any regard whatsoever and no matter how long shall not constitute a waiver of the covenant or condition until performed or waived in writing, and that Party shall be entitled to invoke any remedy available to that Party under the Shared Services Agreement or by applicable law, despite the forbearance or indulgence.

Disputes; Resolution

The Authority and the City shall each designate in writing to the other from time to time a representative who shall be authorized to resolve any dispute relating to the subject matter of the Shared Services Agreement in an equitable manner and, unless otherwise expressly provided herein, to exercise the authority of such party to make decisions by mutual agreement.

The City and the Authority each agree (i) to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner and (ii) to provide each other with reasonable access

during normal business hours to any and all non-privileged written records, information and data pertaining to any such dispute.

If any dispute relating to the subject matter of the Shared Services Agreement is not resolved between the City and the Authority as described under this “Disputes; Resolution” within 30 days from the date on which a party provides written notice to the other party of such dispute and of the notifying party’s position on the disputed matter, then upon written notification by either party to the other party, such dispute shall be settled exclusively and finally by arbitration in accordance with the procedures described under “Arbitration” below.

Arbitration

It is specifically understood and agreed that any dispute or claim arising under or relating to the Shared Services Agreement that cannot be resolved between the City and the Authority, including any matter relating to the interpretation or performance of the Shared Services Agreement, shall be submitted to arbitration irrespective of either the magnitude thereof or the amount in dispute.

Each arbitration between the City and the Authority shall be conducted pursuant to the Uniform Arbitration Act, Act No. 371, Public Acts of Michigan, 2012 (“Act 371”).

The arbitration shall be conducted before a panel composed of three arbitrators (the “Arbitration Panel”). Each party shall appoint an arbitrator, obtain its appointee’s acceptance of such appointment and deliver written notification of such appointment and acceptance to the other party within 15 days after delivery of a notice of arbitration. The two arbitrators appointed by the City and the Authority shall jointly appoint the third (who shall be the chairperson), obtain the acceptance of such appointment and deliver written notification of such appointment within 15 days after their appointment and acceptance.

Any arbitration commenced hereunder shall be completed within 120 days after the appointment of the Arbitration Panel absent agreement of the City and the Authority to the contrary. The City and the Authority waive any claim to any damages in the nature of punitive, exemplary or statutory damages in excess of compensatory damages or otherwise expressly provided for herein, and the Arbitration Panel is specifically divested of any power to award such damages. The Arbitration Panel shall have the power to award injunctive or other equitable relief. All decisions of the Arbitration Panel shall be pursuant to a majority vote. Any interim or final award shall be rendered by written decision.

If either the City or the Authority fails to appoint its arbitrator within 15 days after delivery of a notice of arbitration, or if the two arbitrators appointed cannot agree upon the third arbitrator within 15 days after appointment of the second arbitrator, then the required arbitrator(s) shall be appointed by the American Arbitration Association or as otherwise agreed by the City and the Authority.

No arbitrator shall be a past or present employee or agent of, or consultant or counsel to, either the City or the Authority or any affiliate of either the City or the Authority.

The Authority and the City shall each bear one-half of the out-of-pocket third party costs and expenses of an arbitration, including the arbitrators’ fees.

Appeals of Arbitration Awards and Decisions

The City or the Authority may appeal an award or decision issued by the Arbitration Panel for the reasons set forth in Section 23 of Act 371 (MCL 691.1703).

Enforcement of Arbitration Awards and Decisions

The City or the Authority may enforce any awards or decisions of the Arbitration Panel issued as described under this “Arbitration” pursuant to Section 22 of Act 371 (MCL 691.1702). The provisions described under “Disputes; Resolution” and “Arbitration” above shall be the sole and exclusive remedy of the Parties with respect to any claim or dispute. The City and the Authority agree not to bring, or cause to be brought, in a court of law any action, proceeding or cause of action whatsoever with respect to any such claim or dispute, other than as necessary to enforce the award or decision of the Arbitration Panel as provided above.

Term

The term of the Shared Services Agreement shall run concurrently with the terms of the Leases.

Amendments

The Shared Services Agreement can be amended only by written agreement executed and approved by both Parties, as applicable; provided, that Service Delivery Schedules may be executed, modified, or terminated as described under “Modification or Extension of Service Delivery Schedules” above.

Confidential Information

Each Party acknowledges that it may receive or have access to “Confidential Information,” as that term is defined below (a “Possessing Party”), of the other Party (a “Protected Party”). A Possessing Party shall protect the Protected Party’s Confidential Information with the same degree of care as the Possessing Party uses to avoid unauthorized use, disclosure, publication or dissemination of its own Confidential Information of a similar nature, but in no event, less than a reasonable degree of care. A Possessing Party shall not manipulate, modify, corrupt or otherwise change any of the Confidential Information of the Protected Party. A Possessing Party shall not disclose or otherwise make available the Protected Party’s Confidential Information to any third party without the prior written consent of Protected Party; provided, however, that the Possessing Party may disclose the Confidential Information to its officers and employees who need access to the Confidential Information to perform their obligations to the Protected Party and who are themselves bound by nondisclosure obligations at least as restrictive as those set forth under this “Confidential Information.” Further, the Possessing Party shall comply with all confidentiality-related guidelines, standards and law applicable to the Protected Party. The Possessing Party agrees to immediately notify the Protected Party in the event the Possessing Party becomes aware of any loss or unauthorized disclosure of the Protected Party’s Confidential Information. A Possessing Party shall not utilize any Confidential Information of a Protected Party for its own benefit.

“Confidential Information” means any information related to the business, personnel and operations of the Protected Party obtained by the Possessing Party, and may include but is not limited to information or data related to business affairs, customer billing and usage information, data, manuals, financial and accounting data, data and information concerning contracts, intellectual property, proprietary information and other operational information. Confidential Information shall not include: (A) any information that the Possessing Party can document: (i) was generally available to the public at the time it was received by the Possessing Party, (ii) was known to the Possessing Party, without restriction, at the time of disclosure, or (iii) was independently developed by the Possessing Party without any use of any Confidential Information; and (B) any public records subject to disclosure pursuant to Act 442, Public Acts of Michigan, 1976, as amended.

Upon expiration or termination of the applicable Service Delivery Schedule, the Possessing Party shall promptly return to the Protected Party all Confidential Information of the Protected Party and all copies, or at the Protected Party's option, the Possessing Party shall destroy the Confidential Information.

**APPENDIX IX
FORM OF CONTINUING DISCLOSURE UNDERTAKING**

**GREAT LAKES WATER AUTHORITY
\$917,805,000
Water Supply System Revenue and Revenue Refunding Bonds
Series 2016**

This Continuing Disclosure Undertaking (the “Undertaking”) is executed and delivered by the Great Lakes Water Authority (the “Issuer”) and in connection therewith have examined the law and certified copies of the proceedings and other documents relating to the issuance by the Issuer of: (i) its \$88,000,000 Water Supply System Revenue Senior Lien Bonds, Series 2016A (the “Series 2016A Bonds”), (ii) its \$163,830,000 Water Supply System Revenue Second Lien Bonds, Series 2016B (the “Series 2016B Bonds”), (iii) \$443,930,000 Water Supply System Revenue Refunding Senior Lien Bonds, Series 2016C (the “Series 2016C Bonds”) and (iv) its \$222,045,000 Water Supply System Revenue Refunding Second Lien Bonds, Series 2016D (the “Series 2016D Bonds” and together with the Series 2016A Bonds, the Series 2016B Bonds and the Series 2016C Bonds, the “Series 2016 Bonds”).

The Series 2016 Bonds have been authorized and are being issued pursuant to the provisions of (i) Act 233 and Act 94, Public Acts of Michigan, 1933, as amended (“Act 94”), (ii) Master Bond Ordinance No. 2015-01 adopted by the Board of Directors of the Issuer on October 7, 2015, as amended (the “Bond Ordinance”), (iii) the Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in a Principal Amount not to Exceed \$1,134,000,000, adopted by the Board of Directors of the Issuer on August 10, 2016, as amended (the “2016 Series Ordinance”), and (vi) a Sale Order of the Chief Executive Officer of the Issuer dated October 14, 2016 (the “2016 Sale Order,” and, together with the Bond Ordinance and the 2016 Series Ordinance, the “Ordinance”).

Section 1. Purpose of the Undertaking. This Undertaking is being executed and delivered by the Issuer for the benefit of the Bondholders. The Issuer acknowledges that the State of Michigan (the “State”) has undertaken no responsibility with respect to any notices or disclosures provided or required under this Undertaking and has no liability to any person, including any Bondholders, with respect to any such notices or disclosures. The Issuer acknowledges that this Undertaking does not address the scope of any application of Rule 10b-5 promulgated by the SEC pursuant to the 1934 Act to the notices of the Listed Events provided or required to be provided by the Issuer pursuant to this Undertaking.

Section 2. Definitions. The following capitalized terms shall have the following meanings:

“1934 Act” shall mean the Securities Exchange Act of 1934, as amended.

“Annual Report” shall mean any Annual Report of the Issuer provided by the Issuer pursuant to, and as described in, Sections 3 and 4 of this Undertaking.

“Beneficial Owner” shall mean any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any Series 2016 Bonds (including any person holding Series 2016 Bonds through nominees, depositories or other intermediaries).

“Bondholder” shall mean the registered owner of any Series 2016 Bond and any person which (a) has the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any

of the Series 2016 Bonds (including persons holding Series 2016 Bonds through nominees, depositories or other intermediaries), or (b) is treated as the owner of any of the Series 2016 Bonds for federal income tax purposes.

“Disclosure Dissemination Agent” shall mean the Issuer or any successor Disclosure Dissemination Agent appointed in writing by the Issuer and which has filed with the Issuer a written acceptance of such appointment. In order to provide continuing disclosure with respect to the Series 2016 Bonds in accordance with the Rule in connection with the issuance of the Series 2016 Bonds, the Issuer will enter into a Disclosure Dissemination Agent Agreement (“Disclosure Dissemination Agreement”) for the benefit of the Bondholders with Digital Assurance Certification, L.L.C. (“DAC”), under which the Issuer has designated DAC as Disclosure Dissemination Agent.

“EMMA” shall mean the Electronic Municipal Market Access system of the MSRB. As of the date of this Undertaking, the EMMA Internet Web site address is <http://www.emma.msrb.org>.

“GAAP” shall mean generally accepted accounting principles, as such principles are prescribed, in part, by the Financial Accounting Standards Board and modified by the Governmental Accounting Standards Board and in effect from time to time.

“Listed Events” shall mean any of the events listed in Section 5(a) of this Undertaking.

“MSRB” shall mean the Municipal Securities Rulemaking Board established in accordance with the provisions of Section 15B(b)(1) of the 1934 Act. As of the date of this Undertaking, the address and telephone and telecopy numbers of the MSRB are as follows:

Municipal Securities Rulemaking Board
1900 Duke Street, Suite 600
Alexandria, Virginia 22314
Tel: (703) 797-6600
Fax: (703) 797-6700

“Official Statement” shall mean the final Official Statement for the Series 2016 Bonds dated October 14, 2016.

“Participating Underwriter” shall mean any of the original underwriters of the Series 2016 Bonds required to comply with the Rule in connection with the primary offering of the Series 2016 Bonds.

“Rule” shall mean Rule 15c2-12 (17 CFR Part 240, § 240.15c2-12) promulgated by the SEC pursuant to the 1934 Act, as the same may be amended from time to time, together with all interpretive guidance or other official interpretations or explanations thereof that are promulgated by the SEC.

“SEC” shall mean the United States Securities and Exchange Commission.

“Securities Counsel” shall mean legal counsel expert in federal securities law.

“State” shall mean the State of Michigan.

Section 3. Provision of Annual Reports.

(a) Each year, the Issuer shall provide, or shall cause the Disclosure Dissemination Agent to provide, not later than 270 days after the last day of the Issuer's fiscal year, commencing with the Issuer's Annual Report for its fiscal year ended June 30, 2016, to the MSRB an Annual Report for the preceding fiscal year which is consistent with the requirements of Section 4 of this Undertaking. Not later than 15 business days (or such lesser number of days as is acceptable to the Disclosure Dissemination Agent) prior to said date, the Issuer shall provide the Annual Report to the Disclosure Dissemination Agent (if other than the Issuer). Currently, the Issuer's fiscal year commences on July 1. In each case, the Annual Report may be submitted as a single document or as separate documents comprising a package, and may include by specific reference other information as provided in Section 4 of this Undertaking; provided, however, that if the audited financial statements of the Issuer are not available by the deadline for filing the Annual Report, they shall be provided when and if available, and unaudited financial statements in a format similar to the audited financial statements then most recently prepared for the Issuer shall be included in the Annual Report.

(b) If the Issuer is unable to provide to the MSRB an Annual Report of the Issuer by the date required in subsection (a), the Issuer shall file a notice, in a timely fashion, with the MSRB, in substantially the form attached as Exhibit A.

(c) If the Issuer's fiscal year changes, the Issuer shall file written notice of such change with the MSRB, in substantially the form attached as Exhibit B.

(d) Whenever any Annual Report or portion thereof is filed as described above, it shall be attached to a cover sheet in substantially the form attached as Exhibit C.

(e) If the Disclosure Dissemination Agent is other than the Issuer, the Disclosure Dissemination Agent shall file a report with the Issuer certifying that the Annual Report has been provided pursuant to this Undertaking, stating the date it was provided.

(f) In connection with providing the Annual Report, the Disclosure Dissemination Agent (if other than the Issuer) is not obligated or responsible under this Undertaking to determine the sufficiency of the content of the Annual Report for purposes of the Rule or any other state or federal securities law, rule, regulation or administrative order.

Section 4. Content of Annual Reports. The Issuer's Annual Report shall contain or include by reference the following:

(a) The audited financial statements of the Issuer for its fiscal year immediately preceding the due date of the Annual Report.

(b) An update of the financial information and data contained in the tables under the captions: "THE REGIONAL WATER SYSTEM," "SERVICE AREA AND CUSTOMERS," "THE MASTER PLAN AND THE CAPITAL IMPROVEMENT PLAN," "AUTHORITY FINANCIAL OPERATIONS" (excluding any projections included therein) appearing in the Official Statement.

The Issuer's financial statements shall be audited and prepared in accordance with GAAP with such changes as may be required from time to time in accordance with State law.

Any or all of the items listed above may be included by specific reference to other documents available to the public on the MSRB's Internet Web site or filed with the SEC. The Issuer shall clearly identify each such other document so included by reference.

Section 5. Reporting of Significant Events.

(a) The Issuer covenants to provide, or cause to be provided, notice of the occurrence of any of the following events with respect to the Series 2016 Bonds in a timely manner not in excess of ten (10) business days after the occurrence of the event and in accordance with the Rule:

- (1) Principal and interest payment delinquencies;
- (2) Non-payment related defaults, if material;
- (3) Unscheduled draws on debt service reserves reflecting financial difficulties;
- (4) Unscheduled draws on credit enhancements reflecting financial difficulties;
- (5) Substitution of credit or liquidity providers, or their failure to perform;
- (6) Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Series 2016 Bonds, or other material events affecting the tax status of the Series 2016 Bonds;
- (7) Modifications to rights of security holders, if material;
- (8) Bond calls, if material;
- (9) Defeasances;
- (10) Release, substitution, or sale of property securing repayment of the Series 2016 Bonds, if material;
- (11) Rating changes;
- (12) Tender offers;
- (13) Bankruptcy, insolvency, receivership or similar event of the Issuer;
- (14) The consummation of a merger, consolidation, or acquisition involving an obligated person or the sale of all or substantially all of the assets of the obligated person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and
- (15) Appointment of a successor or additional trustee or the change of name of a trustee, if material.

(b) Whenever the Issuer obtains knowledge of the occurrence of a Listed Event described in subsection (a)(2), (7), (8), (10), (14) or (15), the Issuer shall as soon as possible determine if such Listed

Event would be material under applicable federal securities laws. The Issuer covenants that its determination of materiality will be made in conformance with federal securities laws.

(c) If the Issuer determines that (i) a Listed Event described in subsection (a)(1), (3), (4), (5), (6), (9), (11), (12) or (13) has occurred or (ii) the occurrence of a Listed Event described in subsection (a)(2), (7), (8), (10), (14) or (15) would be material under applicable federal securities laws, the Issuer shall cause a notice of such occurrence to be filed with the MSRB within ten (10) business days of the occurrence of the Listed Event, together with a cover sheet in substantially the form attached as Exhibit D. In connection with providing a notice of the occurrence of a Listed Event described in subsection (a)(9), the Issuer shall include in the notice explicit disclosure as to whether the Series 2016 Bonds have been escrowed to maturity or escrowed to call, as well as appropriate disclosure of the timing of maturity or call.

(d) In connection with providing a notice of the occurrence of a Listed Event, the Disclosure Dissemination Agent (if other than the Issuer), solely in its capacity as such, is not obligated or responsible under this Undertaking to determine the sufficiency of the content of the notice for purposes of the Rule or any other state or federal securities law, rule, regulation or administrative order.

(e) The Issuer acknowledges that the “rating changes” referred to in subsection (a)(11) above may include, without limitation, any change in any rating on the Series 2016 Bonds or other indebtedness for which the Issuer is liable.

(f) The Issuer acknowledges that it is not required to provide a notice of a Listed Event with respect to credit enhancement when the credit enhancement is added after the primary offering of the Series 2016 Bonds, the Issuer does not apply for or participate in obtaining such credit enhancement, and such credit enhancement is not described in the Official Statement.

Section 6. Mandatory Electronic Filing with EMMA.

All filings with the MSRB under this Undertaking shall be made by electronically transmitting such filings through the EMMA Dataport at <http://www.emma.msrb.org> as provided by the amendments to the Rule adopted by the SEC in Securities Exchange Act Release No. 59062 on December 5, 2008.

Section 7. Termination of Reporting Obligation.

(a) The Issuer’s obligations under this Undertaking shall terminate if and when the Issuer’s obligation to pay the principal of and interest on Series 2016 Bonds is assumed in full by some other entity, such entity shall be responsible for compliance with this Undertaking in the same manner as if it were the Issuer, and the Issuer shall have no further responsibility hereunder.

(b) This Undertaking, or any provision hereof, shall be null and void in the event that the Issuer (i) receives an opinion of Securities Counsel, addressed to the Issuer, to the effect that those portions of the Rule, which require such provisions of this Undertaking, do not or no longer apply to the Series 2016 Bonds, whether because such portions of the Rule are invalid, have been repealed, amended or modified, or are otherwise deemed to be inapplicable to the Series 2016 Bonds, as shall be specified in such opinion, and (ii) files notice to such effect with the MSRB.

Section 8. Disclosure Dissemination Agent. The Issuer, from time to time, may appoint or engage a Disclosure Dissemination Agent to assist it in carrying out its obligations under this Undertaking

and may discharge any such Disclosure Dissemination Agent, with or without appointing a successor Disclosure Dissemination Agent. Except as otherwise provided in this Undertaking, the Disclosure Dissemination Agent (if other than the Issuer) shall not be responsible in any manner for the content of any notice or report prepared by the Issuer pursuant to this Undertaking.

Section 9. Amendment; Waiver.

(a) Notwithstanding any other provision of this Undertaking, this Undertaking may be amended, and any provision of this Undertaking may be waived, provided that the following conditions are satisfied:

(i) if the amendment or waiver relates to the provisions of Section 3(a), (b), (c), 4 or 5(a), it may only be made in connection with a change in circumstances that arises from a change in legal requirements, a change in law or a change in the identity, nature or status of the Issuer, or type of business conducted by the Issuer;

(ii) this Undertaking, as so amended or taking into account such waiver, would, in the opinion of Securities Counsel, have complied with the requirements of the Rule at the time of the original issuance of the Series 2016 Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(iii) the amendment or waiver does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Bondholders.

(b) In the event of any amendment to, or waiver of a provision of, this Undertaking, the Issuer shall describe such amendment or waiver in the next Annual Report and shall include an explanation of the reason for such amendment or waiver. In particular, if the amendment results in a change to the annual financial information required to be included in the Annual Report pursuant to Section 4 of this Undertaking, the first Annual Report that contains the amended operating data or financial information shall explain, in narrative form, the reasons for the amendment and the impact of such change in the type of operating data or financial information being provided. Further, if the annual financial information required to be provided in the Annual Report can no longer be generated because the operations to which it related have been materially changed or discontinued, a statement to that effect shall be included in the first Annual Report that does not include such information.

(c) If the amendment results in a change to the accounting principles to be followed in preparing financial statements as set forth in Section 4 of this Undertaking, the Annual Report for the year in which the change is made shall include a comparison between the financial statements or information prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles. The comparison shall include a qualitative discussion of such differences and the impact of the changes on the presentation of the financial information. To the extent reasonably feasible, the comparison shall also be quantitative. A notice of the change in accounting principles shall be filed by the Issuer or the Disclosure Dissemination Agent (if other than the Issuer) at the written direction of the Issuer with the MSRB.

Section 10. Additional Information. Nothing in this Undertaking shall be deemed to prevent the Issuer from disseminating any other information, using the means of dissemination set forth in this Undertaking or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Undertaking. If the Issuer chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Undertaking, the Issuer shall have no obligation under

this Undertaking to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

Section 11. Failure to Comply. In the event of a failure of the Issuer or the Disclosure Dissemination Agent (if other than the Issuer) to comply with any provision of this Undertaking, any Bondholder or Beneficial Owner may bring an action to obtain specific performance of the obligations of the Issuer or the Disclosure Dissemination Agent (if other than the Issuer) under this Undertaking, but no person or entity shall be entitled to recover monetary damages hereunder under any circumstances, and any failure to comply with the obligations under this Undertaking shall not constitute a default with respect to the Series 2016 Bonds. Notwithstanding the foregoing, if the alleged failure of the Issuer to comply with this Undertaking is the inadequacy of the information disclosed pursuant hereto, then the Bondholders and the Beneficial Owners (on whose behalf a Bondholder has not acted with respect to this alleged failure) of not less than a majority of the aggregate principal amount of the then outstanding Series 2016 Bonds must take the actions described above before the Issuer shall be compelled to perform with respect to the adequacy of such information disclosed pursuant to this Undertaking.

Section 12. Duties of Disclosure Dissemination Agent. The Disclosure Dissemination Agent shall have only such duties as are specifically set forth in this Undertaking.

Section 13. Beneficiaries. This Undertaking shall inure solely to the benefit of the Issuer, the Disclosure Dissemination Agent, the Participating Underwriter, the Bondholders and the Beneficial Owners, and shall create no rights in any other person or entity.

Section 14. Transmission of Information and Notices. Unless otherwise required by law or this Undertaking, and, in the sole determination of the Issuer or the Disclosure Dissemination Agent, as applicable, subject to technical and economic feasibility, the Issuer or the Disclosure Dissemination Agent, as applicable, shall employ such methods of information and notice transmission as shall be requested or recommended by the herein-designated recipients of such information and notices.

Section 15. Additional Disclosure Obligations. The Issuer acknowledges and understands that other State and federal laws, including, without limitation, the Securities Act of 1933, as amended, and Rule 10b-5 promulgated by the SEC pursuant to the 1934 Act, may apply to the Issuer, and that under some circumstances, compliance with this Undertaking, without additional disclosures or other action, may not fully discharge all duties and obligations of the Issuer under such laws.

Section 16. Governing Law. This Undertaking shall be construed and interpreted in accordance with the laws of the State, and any suits and actions arising out of this Undertaking shall be instituted in a court of competent jurisdiction in the State. Notwithstanding the foregoing, to the extent this Undertaking addresses matters of federal securities laws, including the Rule, this Undertaking shall be construed and interpreted in accordance with such federal securities laws and official interpretations thereof.

GREAT LAKES WATER AUTHORITY

Dated: October 27, 2016

By: _____
Chief Executive Officer

EXHIBIT A

NOTICE OF FAILURE TO FILE ANNUAL REPORT

Issuer: Great Lakes Water Authority (the "Issuer")
Name of Bond Issue: \$917,805,000 Great Lakes Water Authority Water Supply System
Revenue and Revenue Refunding Bonds, Series 2016
Date of Bonds: October 27, 2016

NOTICE IS HEREBY GIVEN that the Issuer has not provided an Annual Report with respect to the above-named Bonds as required by Section 3 of its Continuing Disclosure Undertaking with respect to such Bonds. The Issuer anticipates that the Annual Report will be filed by _____.

GREAT LAKES WATER AUTHORITY

By: _____
Its _____

Dated: _____

EXHIBIT B

NOTICE OF CHANGE IN ISSUER'S FISCAL YEAR

Issuer: Great Lakes Water Authority
Name of Bond Issue: \$917, 805,000 Great Lakes Water Authority Water Supply System
Revenue and Revenue Refunding Bonds, Series 2016
Date of Bonds: October 27, 2016

NOTICE IS HEREBY GIVEN that the Issuer's fiscal year has changed. Previously, the Issuer's fiscal year ended on _____. It now ends on _____.

GREAT LAKES WATER AUTHORITY

By: _____
Its _____

Dated: _____

EXHIBIT D

EVENT NOTICE COVER SHEET

This cover sheet and the attached Event Notice should be filed electronically with the Municipal Securities Rulemaking Board through the EMMA Dataport at <http://www.emma.msrb.org> pursuant to Securities and Exchange Commission Rule 15c2-12(b)(5)(i)(C) and (D).

Issuer: Great Lakes Water Authority

Issuer's and/or Other Obligated Person's Six-Digit CUSIP Number(s): _____

or Nine-Digit CUSIP Number(s) to which the attached Event Notice relates: _____

Number of pages of the attached Event Notice: _____

Description of the attached Event Notice (Check One):

- | | | |
|-----|-------|--|
| 1. | _____ | Principal and interest payment delinquencies |
| 2. | _____ | Non-Payment related defaults |
| 3. | _____ | Unscheduled draws on debt service reserves reflecting financial difficulties |
| 4. | _____ | Unscheduled draws on credit enhancements reflecting financial difficulties |
| 5. | _____ | Substitution of credit or liquidity providers, or their failure to perform |
| 6. | _____ | Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the security, or other material events affecting the tax status of the security |
| 7. | _____ | Modifications to rights of securities holders |
| 8. | _____ | Bond calls |
| 9. | _____ | Defeasances |
| 10. | _____ | Release, substitution, or sale of property securing repayment of the securities |
| 11. | _____ | Rating changes |
| 12. | _____ | Tender offers |
| 13. | _____ | Bankruptcy, insolvency, receivership or similar event of an obligated person |
| 14. | _____ | The consummation of a merger, consolidation, or acquisition involving an obligated person or the sale of all or substantially all of the assets of an obligated person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms |
| 15. | _____ | Appointment of a successor or additional trustee, or the change of name of a trustee |
| 16. | _____ | Failure to provide annual financial information as required |
| 17. | _____ | Other material event notice (specify) _____ |

I hereby represent that I am authorized by the Issuer or its agent to distribute this information publicly:

Signature: _____

Name: _____ Title: _____

Employer: _____

Address: _____

City, State, Zip Code: _____

Voice Telephone Number: _____

Please format the Event Notice attached to this cover sheet in 10 point type or larger. Contact the MSRB at (202) 223-9503 with questions regarding this form or the dissemination of this notice.

APPENDIX X
FORM OF APPROVING OPINION OF BOND COUNSEL

October 27, 2016

Great Lakes Water Authority
Counties of Macomb, Oakland and Wayne, Michigan

We have acted as bond counsel to the Great Lakes Water Authority, Counties of Macomb, Oakland and Wayne, Michigan (the “Issuer”) and in connection therewith have examined the law and certified copies of the proceedings and other documents relating to the issuance by the Issuer of (i) its \$88,000,000 Water Supply System Revenue Senior Lien Bonds, Series 2016A (the “Series 2016A Bonds”), (ii) its \$163,830,000 Water Supply System Revenue Second Lien Bonds, Series 2016B (the “Series 2016B Bonds”), (iii) its \$443,930,000 Water Supply System Revenue Refunding Senior Lien Bonds, Series 2016C (the “Series 2016C Bonds”) and (iv) its \$222,045,000 Water Supply System Revenue Refunding Second Lien Bonds, Series 2016D (the “Series 2016D Bonds, and together with the Series 2016A Bonds, the Series 2016 B Bonds and the Series 2016C Bonds, the “Bonds”). The Bonds are dated October 14, 2016, are payable as to principal and interest as provided in the Bonds and are subject to redemption prior to maturity in the manner, at the times and at the prices specified in the Bonds.

The Bonds are issued pursuant to (i) Act 233, Public Acts of Michigan, 1955, as amended (“Act 233”), (ii) Act 94, Public Acts of Michigan, 1933, as amended (“Act 94”), (iii) Ordinance No. 2015-01 adopted by the Board of Directors of the Issuer on October 7, 2015, as amended (the “Bond Ordinance”), (iv) Ordinance No. 2016-08 adopted by the Board of Directors of the Issuer on August 10, 2016, as amended (the “Series Ordinance”), and (v) a Sale Order of the Chief Executive Officer of the Issuer executed October 14, 2016 (the “Sale Order,” and together with the Bond Ordinance and the Series Ordinance, the “Ordinance”). Capitalized terms not otherwise defined herein shall have the meaning given such terms in the Bond Ordinance.

As to questions of fact material to our opinion, we have relied upon certified proceedings and other certificates of public officials furnished to us without undertaking to verify the same by an independent investigation.

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

1. The Issuer is duly organized and validly existing as a municipal authority and public body corporate under Act 233.
2. The Bond Ordinance and the Series Ordinance have been duly and lawfully adopted by the Issuer and the Sale Order has been duly executed by the Chief Executive Officer of the Issuer, and each of the Bond Ordinance, the Series Ordinance and the Sale Order is in full force and effect and is valid and binding upon the Issuer and enforceable in accordance with its terms.
3. The Bonds have been duly authorized, executed and delivered by the Issuer and are valid and legally binding obligations of the Issuer, secured by and payable solely from the Pledged Assets, which includes a pledge of the Net Revenues of the Water System.
4. Pursuant to Act 94, the Ordinance creates a valid statutory lien on the Pledged Assets as security for payment of the principal of and interest on the Bonds, on a senior lien basis, parity lien basis or junior lien basis with other bonds previously issued, currently being issued and to be issued hereafter,

as described in the Bonds.

5. The Bonds and the interest thereon are exempt from taxation by the State of Michigan or by any taxing authority within the State of Michigan, except estate taxes and taxes on gains realized from the sale, payment or other disposition thereof.

6. The interest on the Bonds (a) is excluded from gross income for federal income tax purposes and (b) is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations; we note, however, that certain corporations must take into account interest on the Bonds in determining adjusted current earnings for the purpose of computing such alternative minimum tax. The opinion set forth in clause (a) above is subject to the condition that the Issuer comply with all requirements of the Internal Revenue Code of 1986, as amended, that must be satisfied subsequent to the issuance of the Bonds in order that the interest thereon be (or continue to be) excluded from gross income for federal income tax purposes. The Issuer has covenanted to comply with each such requirement. Failure to comply with certain of such requirements could cause the interest on the Bonds to be so included in gross income retroactive to the date of issuance of the Bonds. We express no opinion regarding other federal tax consequences arising with respect to the Bonds.

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

This opinion is given as of the date hereof, and we assume no obligation to revise or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention, or any changes in law that may hereafter occur.

Respectfully submitted,

APPENDIX XI BOOK-ENTRY ONLY SYSTEM

Book-Entry-Only System

The information in this appendix “Book-Entry-Only System” has been furnished by The Depository Trust Company (“DTC”). No representation is made by the Authority, the State, the Trustee or the Underwriters as to the completeness or accuracy of such information or as to the absence of material adverse changes in such information subsequent to the date hereof. No attempt has been made by the Authority, the State, the Trustee or the Underwriters to determine whether DTC is or will be financially or otherwise capable of fulfilling its obligations. Neither the Authority, the State nor the Trustee will have any responsibility or obligation to DTC Direct Participants, Indirect Participants (both as defined below) or the persons for which they act as nominees with respect to the Series 2016 Bonds, or for any principal, premium, if any, or interest payment thereof.

DTC will act as securities depository for the Series 2016 Bonds. The Series 2016 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 certificate will be issued for each maturity of each Type of the Series 2016 Bonds, in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world’s largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. 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.

Purchases of the Series 2016 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2016 Bonds on DTC’s records. The ownership interest of each actual purchaser of each Series 2016 Bond (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participants’ records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Bonds are to be accomplished by entries made on the books of Direct and

Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interest in the Series 2016 Bonds, except in the event that use of the book-entry system for the Series 2016 Bonds is discontinued.

To facilitate subsequent transfers, all Series 2016 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 Series 2016 Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2016 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2016 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 the Series 2016 Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series 2016 Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Security documents. For example, Beneficial Owners of Series 2016 Bonds may wish to ascertain that the nominee holding the Series 2016 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 the notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Series 2016 Bonds within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Series 2016 Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Series 2016 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payments on the Series 2016 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 Participant's accounts upon DTC's receipt of funds and corresponding detail information from the Authority or Trustee, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC (nor its nominee), the Trustee, or the Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Authority or the Trustee, 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 securities depository with respect to the Series 2016 Bonds at any time by giving reasonable notice to the Authority or Trustee. Under such

circumstances, in the event that a successor securities depository is not obtained, Series 2016 Bond certificates are required to be printed and delivered.

The Authority may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Series 2016 Bond certificates will be printed and delivered.

The information in this section concerning DTC and DTC's book-entry-only system has been obtained from sources that the Authority believes to be reliable, but neither the Authority nor the Underwriters take any responsibility for the accuracy thereof. The Authority and the Underwriters cannot and do not give any assurances that DTC, the Direct and Indirect Participants or others will distribute payments of principal and interest with respect to the Series 2016 Bonds paid to Cede & Co. or another DTC nominee as the Owner, or will distribute any redemption or other notices to the Beneficial Owners, or that they will do so on a timely basis or will serve and act in the manner described in this Official Statement. The Authority and the Underwriters are not responsible or liable for the failure of DTC or any Participant to make any payment or give any notice to a Beneficial Owner with respect to the Series 2016 Bonds or an error or delay relating thereto.

APPENDIX XII
SPECIMEN MUNICIPAL BOND INSURANCE POLICY



MUNICIPAL BOND INSURANCE POLICY

ISSUER:

BONDS: \$ in aggregate principal amount of

Policy No: -N

Effective Date:

Premium: \$

ASSURED GUARANTY MUNICIPAL CORP. ("AGM"), for consideration received, hereby UNCONDITIONALLY AND IRREVOCABLY agrees to pay to the trustee (the "Trustee") or paying agent (the "Paying Agent") (as set forth in the documentation providing for the issuance of and securing the Bonds) for the benefit of the Owners or, at the election of AGM, directly to each Owner, subject only to the terms of this Policy (which includes each endorsement hereto), that portion of the principal of and interest on the Bonds that shall become Due for Payment but shall be unpaid by reason of Nonpayment by the Issuer.

On the later of the day on which such principal and interest becomes Due for Payment or the Business Day next following the Business Day on which AGM shall have received Notice of Nonpayment, AGM will disburse to or for the benefit of each Owner of a Bond the face amount of principal of and interest on the Bond that is then Due for Payment but is then unpaid by reason of Nonpayment by the Issuer, but only upon receipt by AGM, in a form reasonably satisfactory to it, of (a) evidence of the Owner's right to receive payment of the principal or interest then Due for Payment and (b) evidence, including any appropriate instruments of assignment, that all of the Owner's rights with respect to payment of such principal or interest that is Due for Payment shall thereupon vest in AGM. A Notice of Nonpayment will be deemed received on a given Business Day if it is received prior to 1:00 p.m. (New York time) on such Business Day; otherwise, it will be deemed received on the next Business Day. If any Notice of Nonpayment received by AGM is incomplete, it shall be deemed not to have been received by AGM for purposes of the preceding sentence and AGM shall promptly so advise the Trustee, Paying Agent or Owner, as appropriate, who may submit an amended Notice of Nonpayment. Upon disbursement in respect of a Bond, AGM shall become the owner of the Bond, any appurtenant coupon to the Bond or right to receipt of payment of principal of or interest on the Bond and shall be fully subrogated to the rights of the Owner, including the Owner's right to receive payments under the Bond, to the extent of any payment by AGM hereunder. Payment by AGM to the Trustee or Paying Agent for the benefit of the Owners shall, to the extent thereof, discharge the obligation of AGM under this Policy.

Except to the extent expressly modified by an endorsement hereto, the following terms shall have the meanings specified for all purposes of this Policy. "Business Day" means any day other than (a) a Saturday or Sunday or (b) a day on which banking institutions in the State of New York or the Insurer's Fiscal Agent are authorized or required by law or executive order to remain closed. "Due for Payment" means (a) when referring to the principal of a Bond, payable on the stated maturity date thereof or the date on which the same shall have been duly called for mandatory sinking fund redemption and does not refer to any earlier date on which payment is due by reason of call for redemption (other than by mandatory sinking fund redemption), acceleration or other advancement of maturity unless AGM shall elect, in its sole discretion, to pay such principal due upon such acceleration together with any accrued interest to the date of acceleration and (b) when referring to interest on a Bond, payable on the stated date for payment of interest. "Nonpayment" means, in respect of a Bond, the failure of the Issuer to have provided sufficient funds to the Trustee or, if there is no Trustee, to the Paying Agent for payment in full of all principal and interest that is Due for Payment on such Bond. "Nonpayment" shall also include, in respect of a Bond, any payment of principal or interest that is Due for Payment made to an Owner by or on behalf of the Issuer which has been recovered from such Owner pursuant to the

United States Bankruptcy Code by a trustee in bankruptcy in accordance with a final, nonappealable order of a court having competent jurisdiction. "Notice" means telephonic or telecopied notice, subsequently confirmed in a signed writing, or written notice by registered or certified mail, from an Owner, the Trustee or the Paying Agent to AGM which notice shall specify (a) the person or entity making the claim, (b) the Policy Number, (c) the claimed amount and (d) the date such claimed amount became Due for Payment. "Owner" means, in respect of a Bond, the person or entity who, at the time of Nonpayment, is entitled under the terms of such Bond to payment thereof, except that "Owner" shall not include the Issuer or any person or entity whose direct or indirect obligation constitutes the underlying security for the Bonds.

AGM may appoint a fiscal agent (the "Insurer's Fiscal Agent") for purposes of this Policy by giving written notice to the Trustee and the Paying Agent specifying the name and notice address of the Insurer's Fiscal Agent. From and after the date of receipt of such notice by the Trustee and the Paying Agent, (a) copies of all notices required to be delivered to AGM pursuant to this Policy shall be simultaneously delivered to the Insurer's Fiscal Agent and to AGM and shall not be deemed received until received by both and (b) all payments required to be made by AGM under this Policy may be made directly by AGM or by the Insurer's Fiscal Agent on behalf of AGM. The Insurer's Fiscal Agent is the agent of AGM only and the Insurer's Fiscal Agent shall in no event be liable to any Owner for any act of the Insurer's Fiscal Agent or any failure of AGM to deposit or cause to be deposited sufficient funds to make payments due under this Policy.

To the fullest extent permitted by applicable law, AGM agrees not to assert, and hereby waives, only for the benefit of each Owner, all rights (whether by counterclaim, setoff or otherwise) and defenses (including, without limitation, the defense of fraud), whether acquired by subrogation, assignment or otherwise, to the extent that such rights and defenses may be available to AGM to avoid payment of its obligations under this Policy in accordance with the express provisions of this Policy.

This Policy sets forth in full the undertaking of AGM, and shall not be modified, altered or affected by any other agreement or instrument, including any modification or amendment thereto. Except to the extent expressly modified by an endorsement hereto, (a) any premium paid in respect of this Policy is nonrefundable for any reason whatsoever, including payment, or provision being made for payment, of the Bonds prior to maturity and (b) this Policy may not be canceled or revoked. THIS POLICY IS NOT COVERED BY THE PROPERTY/CASUALTY INSURANCE SECURITY FUND SPECIFIED IN ARTICLE 76 OF THE NEW YORK INSURANCE LAW.

In witness whereof, ASSURED GUARANTY MUNICIPAL CORP. has caused this Policy to be executed on its behalf by its Authorized Officer.

ASSURED GUARANTY MUNICIPAL CORP.

By

Authorized Officer

A subsidiary of Assured Guaranty Municipal Holdings Inc. 1633
Broadway, New York, N.Y. 10019
(212) 974-0100

Form 500NY (5/90)