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."



\$421,295,000 GREAT LAKES WATER AUTHORITY Sewage Disposal System Revenue Refunding Bonds Series 2016

\$126,105,000 Sewage Disposal System Revenue Refunding Senior Lien Bonds Series 2016B \$295,190,000 Sewage Disposal System Revenue Refunding Second Lien Bonds Series 2016C

Dated: Date of Delivery

Due as shown on inside cover page

The Sewage Disposal System 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), and (ii) 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 redemption prior to maturity. See "THE SERIES 2016 BONDS - Optional Redemption."

The scheduled payment of principal of and interest on the Series 2016C Bonds maturing on July 1, 2033 (CUSIP No. 39081HAP7) (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 Sewer 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

\$126,105,000 Sewage Disposal System Revenue Refunding Senior Lien Bonds Series 2016B

Serial Bonds

Maturity	Principal			
(July 1)	<u>Amount</u>	Interest Rate	<u>Yield</u>	<u>CUSIP</u> †
2024	\$4,610,000	5.00%	2.11%	39081HAA0
2025	9,455,000	5.00%	2.25%	39081HAB8
2026	380,000	5.00%	2.38%	39081HAC6
2027	405,000	5.00%	$2.51\%^*$	39081HAD4
2030	27,710,000	5.00%	$2.87\%^{*}$	39081HAE2
2031	16,935,000	5.00%	$2.96\%^{*}$	39081HAF9
2032	3,500,000	5.00%	3.02%*	39081HAG7
2033	20,670,000	5.00%	$3.07\%^{*}$	39081HAH5
2034	42,440,000	5.00%	3.12%*	39081HAJ1

\$295,190,000 Sewage Disposal System Revenue Refunding Second Lien Bonds Series 2016C

Serial Bonds

Maturity	Principal			
(July 1)	<u>Amount</u>	Interest Rate	Yield*	<u>CUSIP</u> †
2027	\$380,000	5.00%	2.66%	39081HAK8
2030	32,275,000	5.00%	3.02%	39081HAL6
2031	33,895,000	5.00%	3.11%	39081HAM4
2032	1,505,000	5.00%	3.17%	39081HAN2
2033^{\neq}	4,750,000	4.00%	3.40%	39081HAP7
2034	19,245,000	4.00%	3.57%	39081HAQ5
2035	50,580,000	5.00%	3.31%	39081HAR3
2036	152,560,000	5.00%	3.34%	39081HAS1

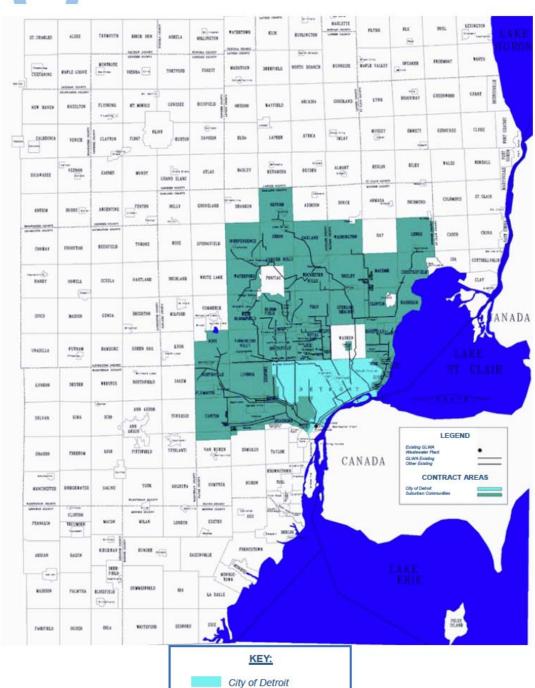
[†] Registered trademark of American Bankers Association. CUSIP data herein is provided by Standard and Poor's CUSIP Service Bureau, a division of the McGraw Hill Companies, Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP service. CUSIP 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.

^{*} Insured Maturity by Assured Guaranty Municipal Corp.



Wastewater Service Area



Suburban Communities

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 Sewer System (as defined herein) is one of the largest in the United States, both in terms of treatment capacity and population served. The Sewer System currently serves an area of 988 square miles located in three Michigan counties and an estimated population of nearly 2.8 million or approximately 28% of Michigan's population. Suburban customers comprise approximately 75% of the population served by the Authority, and the Retail Sewer 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 Sewer 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 Sewer 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 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. See "THE SERIES 2016 BONDS – Optional Redemption."

Pledged Security and Statutory Lien: The Series 2016 Bonds are payable from the Pledged Assets (as defined herein), which include the Net Revenues of the Sewer System. The Authority has irrevocably pledged the Net Revenues (as defined herein) of the Sewer 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 average 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 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.

Rate Covenant Debt Service Coverage (d)	_	_	_	_	_
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
Projected Debt Service Coverage	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Senior Lien Bonds	2.20	2.23	2.18	2.22	2.48
Senior and Second Lien Bonds	1.65	1.71	1.70	1.73	1.82
All Bonds, Including SRF Junior Lien	1.32	1.37	1.36	1.38	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 2016C Bonds maturing on July 1, 2033 (CUSIP No. 39081HAP7) (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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AS OF AND FOR THE YEAR ENDED JUNE 30, 2015

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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 \$126,105,000 Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2016B (the "Series 2016B Bonds") and its \$295,190,000 Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2016C (the "Series 2016C Bonds," and collectively with the Series 2016B 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") 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 "Water Lease"), a Regional Sewage Disposal System Lease (the "Lease" or the "Sewer Lease" and together with the Water 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 Sewer System, including the payment of all DWSD Sewer Bonds (as defined herein), through the substitution of GLWA for the City as the sole obligor on the DWSD Sewer Bonds, the assignment to GLWA of all of the revenues of the Sewer System, and the assumption by GLWA of the DWSD Sewer 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"), and (ii) 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. 2015-02 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 Sewage Disposal System Revenue Refunding Bonds in a Principal Amount not to Exceed \$600,000,000, adopted by the GLWA Board on August 10, 2016 (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 Sewer System, after provision is made for reasonable and necessary expenses of operation, maintenance and administration of the Sewer 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 Sewer 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 Water 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 Water 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 Sewer Bonds, including all of the obligations to make payments of principal of and interest on the DWSD Sewer Bonds. In acquiring the Leased Sewer 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 Sewer 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 \$27,500,000 per year, to be funded from a portion of the common-to-all revenue requirements for the Regional Sewer System. See APPENDIX V – SUMMARY OF THE LEASE.

In January 2016, GLWA began operating the largest regional sewer 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 Sewer 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 Sewer System operations, from environmental compliance to customer satisfaction, and have materially improved the Sewer 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.

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 or 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

The GLWA has been awarded the prestigious Peak Performance Award in the Silver category from the National Association of Clean Water Agencies for three of the past four years. This award recognizes member agency facilities for excellence in NPDES permit compliance.

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 multigenerational 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.

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:

Total Uses:	\$516,709,069.50
Costs of Issuance	2,370,672.21
Deposit to Escrow Fund	\$514,338,397.29
<u>Uses</u> :	
Total Sources:	\$516,709,069.50
Amounts Released from Bond Reserve Accounts	23,824,438.76
Amounts Available in Bond Funds Related to Refunded Bonds	10,416,902.04
Original Issue Premium	61,172,728.70
Par Amount	\$421,295,000.00

Plan of Financing

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

A portion of the proceeds of the Series 2016 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.

Bond Insurance

The scheduled payment of the principal of and interest on the Series 2016C Bonds maturing on July 1, 2033 (CUSIP No. 39081HAP7) (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 2016C 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 Sewer 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 Sewer 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 Sewer 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. 18-01 and the related Trust Indenture of the City relating to the DWSD Sewer Bonds for the efficient administration of the Regional Sewer System, the assumption of the DWSD Sewer Bonds, and the issuance of Additional Bonds to finance additional costs of extensions, additions and improvements to the Regional Sewer System and the Local Sewer System, which may be secured by parity or subordinate lien interests in the Net Revenues with the DWSD Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer 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:

<u>First</u>: 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 Sewer System and the Local Sewer 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 Sewer System and the Local Sewer System, respectively, and such current expenses for the maintenance thereof as may be necessary to preserve the same in good repair and working order;

<u>Second</u>: 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;

<u>Third</u>: 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;

<u>Fourth</u>: 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;

<u>Fifth</u>: 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;

<u>Eighth</u>: 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 Sewer System and Local Sewer 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 Sewage Disposal 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 Sewage Disposal 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 Sewage Disposal 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 Sewer 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 Sewer System as the Bond Ordinance may require;
- Amounts so that the Rate Covenant Debt Service Coverage shall not be less that 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 Sewer System as shall be sufficient to provide for the foregoing. Act 94 also provides that the Sewer 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 average 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	\$143,166,664	\$69,220,996	\$212,387,659	
Funding Amounts				
Cash and Investments [†]	35,495,473	30,270,996	65,766,469	
Credit Facilities*	107,721,191	39,000,000	146,721,191	
Total	\$143,216,664	\$69,270,996	\$212,487,659	

[†]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) National Public Finance Guarantee Corporation ("National"), as reinsurer of and administrative agent for MBIA Insurance Corporation ("MBIA"), policy unconditionally guaranteeing the payment of principal of and interest on the Series 1999-SRF2, Series 1999-SRF3 and Series 1999-SRF4 Bonds up to a maximum aggregate available amount of \$7,482,000 and with a termination date equal to

the earlier of October 1, 2022, or the date on which all three series of such Bonds are no longer outstanding.

- (b) Financial Guaranty Insurance Corporation ("FGIC") policy unconditionally guaranteeing the payment of principal of and interest on any Senior Lien Bonds, up to a maximum aggregate available amount of \$17,301,095 and with a termination date of July 1, 2029.
- (c) FGIC policy unconditionally guaranteeing the payment of principal of and interest on any Senior Lien Bonds, up to a maximum aggregate available amount of \$3,618,077 and with a termination date of July 1, 2031.
- (d) Assured Guaranty Municipal Corp., formerly known as Financial Security Assurance Inc. ("AGM"), policy unconditionally guaranteeing the payment of principal of and interest on any Senior Lien Bonds up to a maximum aggregate available amount of \$51,800,000* and with a termination date of July 15, 2033.
- (e) AGM policy unconditionally guaranteeing the payment of principal and interest on the Senior Lien Bonds, Series 2014C, up to a maximum aggregate available amount of \$44,617,000 and with a termination date of the earlier of July 1, 2033 or the date such bonds are no longer outstanding.

As of the date of this Official Statement (except as noted in (c) below), 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) National, as reinsurer of and administrative agent for MBIA, policy unconditionally guaranteeing the payment of the principal of and interest on any Second Lien Bonds up to a maximum aggregate available amount of \$22,000,000 and with a termination date equal to the earlier of July 1, 2035 or the date on which all of the Series 2005(A), Series 2005(B) and Series 2005(C) Bonds are no longer outstanding.
- (b) FGIC policy unconditionally guaranteeing the payment of the principal of and interest on any Second Lien Bonds up to a maximum aggregate available amount of \$17,000,000 and with a termination date of July 1, 2036.
- (c) AGM has issued a commitment to issue a policy concurrently with the delivery of the Series 2016 Bonds which will unconditionally guarantee the payment of the principal and interest on any Second Lien Bonds, in varying amounts, up to a maximum aggregate available amount of \$4,500,000 and with a termination date of July 1, 2024. The policy limit from July 1, 2017 to July 1, 2018 is \$1,000,000, from July 1, 2018 to July 1, 2019 is \$2,500,000, from July 1, 2019 to July 1, 2020 is \$4,000,000, from July 1, 2020 to July 1, 2021 is \$4,500,000, from July 1, 2021 to July 1, 2022 is \$2,750,000, from July 1, 2022 to July 1, 2023 is \$1,600,000 and from July 1, 2023 to July 1, 2024 is \$1,300,000.

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.

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^{*} The AGM policy limit is the dollar amount of debt service reserve fund required to be maintained for the Series 2003(A) and Series 2003(B) Bonds by the related bond documents from time to time, but in no event will the policy limit exceed \$51,800,000 to July 15, 2029, \$69,200,000 from July 15, 2029 to July 15, 2031, and thereafter \$72,800,000 to the termination date.

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 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.

OUTSTANDING AUTHORITY INDEBTEDNESS

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

wage Disposal System Revenue Bonds	Or	iginal Principal Amount	Outstanding as of October 14, 2016	
nior Lien Bonds				
Sewage Disposal System Revenue Bonds (Senior), Series 1997-B-SRF	\$	5,430,174	\$	650,000
Sewage Disposal System Revenue Refunding Bonds, Series 1998A		67,615,000		20,750,00
Sewage Disposal System Revenue Refunding Bonds, Series 1998B		67,520,000		21,650,00
Sewage Disposal System Revenue Bonds (Senior), Series 1999-SRF1		21,475,000		5,180,00
Sewage Disposal System Revenue Bonds (Senior), Series 1999-SRF2		46,000,000		16,280,00
Sewage Disposal System Revenue Bonds (Senior), Series 1999-SRF3		31,030,000		7,505,00
Sewage Disposal System Revenue Bonds (Senior), Series 1999-SRF4		40,655,000		9,830,00
Sewage Disposal System Revenue Bonds, Series 1999A ⁽¹⁾		302,995,178		22,815,00
Sewage Disposal System Senior Lien Revenue Refunding Bonds, Series 2001C1		154,870,000		41,800,00
Sewage Disposal System Senior Lien Revenue Refunding Bonds, Series 2001C2		122,905,000	1	07,750,00
Sewage Disposal System Senior Lien Revenue & Revenue Refunding Bonds, Series 2003A		599,380,000		3,150,00
Sewage Disposal System Senior Lien Revenue Bonds, Series 2003B		150,000,000		100,00
Sewage Disposal System Senior Lien Revenue Refunding Bonds, Series 2004A Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2006D		101,435,000 370,000,000		35,010,00 39,475,00
Sewage Disposal System Revenue & Revenue Refunding Senior Lien Bonds, Series 2000D Sewage Disposal System Revenue & Revenue Refunding Senior Lien Bonds, Series 2012A		659,780,000		27,355,00
Sewage Disposal System Revenue Senior Lien Bonds, Series 2014A		123,220,000		23,220,00
Sewage Disposal System Revenue Senior Lien Bonds, Series 2014B		27,470,000		27,470,00
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2014C		446,170,000		46,170,00
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2014D		95,165,000		95,165,00
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2014E		143,880,000		88,900,00
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2016B		126,105,000		26,105,00
	\$	3,703,100,352	\$ 1,9	66,330,00
cond Lien Bonds				
Sewage Disposal System Second Lien Revenue Bonds, Series 2001B	\$	110,550,000	\$	78,895,00
Sewage Disposal System Revenue Second Lien Bonds, Series 2005A		241,570,000		31,885,00
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2005B		40,215,000		17,115,00
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2005C		63,160,000		100,00
Sewage Disposal System Revenue Second Lien Bonds, Series 2006B		250,000,000		55,100,00
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2014F		76,715,000		76,715,00
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2014G Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2015C		23,240,000 197,660,000		11,805,00 97,660,00
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2016C		295,190,000		95,190,00
	\$	1,298,300,000	\$ 7	64,465,00
EF Junior Lien Bonds				
Sewage Disposal System Revenue Bonds, Series 2000-SRF1	\$	44,197,995	\$	13,947,99
Sewage Disposal System Revenue Bonds, Series 2000-SRF2		64,401,066		22,691,06
Sewage Disposal System Revenue Bonds, Series 2001-SRF1		82,200,000		37,865,00
Sewage Disposal System Revenue Bonds, Series 2001-SRF2		59,850,000		27,575,00
Sewage Disposal System Revenue Bonds, Series 2002-SRF1		18,985,000		7,735,00
Sewage Disposal System Revenue Bonds, Series 2002-SRF2		1,545,369		630,36
Sewage Disposal System Revenue Bonds, Series 2002-SRF3		31,549,466		13,399,46
Sewage Disposal System Revenue Bonds, Series 2003-SRF1		48,520,000		24,845,00
Sewage Disposal System Revenue Bonds, Series 2003-SRF2		25,055,370		12,740,37
Sewage Disposal System Revenue Bonds, Series 2004-SRF1		2,910,000		1,310,00
Sewage Disposal System Revenue Bonds, Series 2004-SRF2		18,353,459		9,193,45
Sewage Disposal System Revenue Bonds, Series 2004-SRF3		12,722,575		6,357,57
Sewage Disposal System Revenue Bonds, Series 2007-SRF		167,565,000		14,950,59
Sewage Disposal System Revenue Bonds, Series 2009-SRF		16,785,000		10,160,06
Sewage Disposal System Revenue Bonds, Series 2010-SRF		4,899,000		3,300,76
Savaga Dispasal System Payanua Ponds Sarias 2012 SDE		14,950,000		13,765,00 79,500,00
Sewage Disposal System Revenue Bonds, Series 2012-SRF		81 000 000		17,200,00
Sewage Disposal System Revenue Bonds, Series 2015A-SRF		81,000,000		31.740.00
Sewage Disposal System Revenue Bonds, Series 2015A-SRF Sewage Disposal System Revenue Bonds, Series 2015B-SRF		33,030,000		
Sewage Disposal System Revenue Bonds, Series 2015A-SRF Sewage Disposal System Revenue Bonds, Series 2015B-SRF Sewage Disposal System Revenue Bonds, Series 2015D-SRF		33,030,000 21,485,000		18,725,00
Sewage Disposal System Revenue Bonds, Series 2015A-SRF Sewage Disposal System Revenue Bonds, Series 2015B-SRF		33,030,000		18,725,00 10,000,00
Sewage Disposal System Revenue Bonds, Series 2015A-SRF Sewage Disposal System Revenue Bonds, Series 2015B-SRF Sewage Disposal System Revenue Bonds, Series 2015D-SRF Sewage Disposal System Revenue Bonds, Series 2016-SAW	\$	33,030,000 21,485,000 10,000,000		31,740,00 18,725,00 10,000,00 70,615,00 31,046,72

⁽¹⁾ Outstanding amount shown is the maturity value of Capital Appreciation Bonds.

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.

	Senior Lien Bonds						Second Lien Bonds							
			Senior	Lien Bonds, Series	s 2016			Second Lien Bonds, Series 2016						
Fiscal Year Ended June 30	r Outstanding Senior Lien Debt Service ⁽³⁾	Less: Refunded Debt Service	Principal	Interest	Total	Total Senior Lien Debt Service ⁽³⁾	Outstanding Second Lien Debt Service	Less: Refunded Debt Service	Principal	Interest	Total	Total Second Lien Debt Service	Outstanding SRF Junior Lien Debt Service (1)	Total System Debt Service ⁽³⁾
2017(4)	\$ 143,518,003	\$ (5,455,183)	s -	\$ 4,273,558	\$ 4,273,558	\$ 142,336,378	\$ 53,456,231	\$ (15,378,621)	s -	\$ 9,841,028	\$ 9,841,028	\$ 47,918,639	\$ 47,574,835	\$ 237,829,852
2018	143,539,356	(7,467,775)	-	6,305,250	6,305,250	142,376,831	53,422,231	(23,951,681)	-	14,519,550	14,519,550	43,990,100	48,266,045	234,632,976
2019	143,303,650	(2,595,775)	-	6,305,250	6,305,250	147,013,125	53,299,231	(23,896,181)	-	14,519,550	14,519,550	43,922,600	49,676,934	240,612,659
2020	142,889,413	(2,595,775)	-	6,305,250	6,305,250	146,598,888	55,229,981	(23,870,681)	-	14,519,550	14,519,550	45,878,850	51,374,067	243,851,804
2021	128,799,581	(2,595,775)	-	6,305,250	6,305,250	132,509,056	64,247,056	(24,124,506)	-	14,519,550	14,519,550	54,642,100	51,567,669	238,718,825
2022	140,510,494	(2,595,775)	-	6,305,250	6,305,250	144,219,969	57,484,756	(23,900,056)	-	14,519,550	14,519,550	48,104,250	51,596,881	243,921,100
2023	147,533,644	(2,595,775)	-	6,305,250	6,305,250	151,243,119	48,414,231	(24,148,256)	-	14,519,550	14,519,550	38,785,525	46,124,566	236,153,210
2024	143,242,563	(6,630,775)	4,610,000	6,305,250	10,915,250	147,527,038	63,181,669	(26,266,519)	-	14,519,550	14,519,550	51,434,700	43,434,438	242,396,175
2025	137,563,900	(10,693,850)	9,455,000	6,074,750	15,529,750	142,399,800	63,833,294	(26,816,394)	-	14,519,550	14,519,550	51,536,450	34,165,309	228,101,559
2026	152,636,475	(1,916,250)	380,000	5,602,000	5,982,000	156,702,225	66,201,456	(26,048,656)	-	14,519,550	14,519,550	54,672,350	26,400,073	237,774,648
2027	152,847,088	(1,916,250)	405,000	5,583,000	5,988,000	156,918,838	69,844,344	(26,430,919)	380,000	14,519,550	14,899,550	58,312,975	25,613,407	240,845,219
2028	153,100,750	(1,916,250)	-	5,562,750	5,562,750	156,747,250	68,911,369	(25,609,144)	-	14,500,550	14,500,550	57,802,775	25,607,241	240,157,266
2029	153,270,933	(1,916,250)	-	5,562,750	5,562,750	156,917,433	60,599,019	(25,477,519)	-	14,500,550	14,500,550	49,622,050	25,602,791	232,142,274
2030	125,559,545	(1,916,250)	27,710,000	5,562,750	33,272,750	156,916,045	100,459,844	(85,988,344)	32,275,000	14,500,550	46,775,550	61,247,050	17,987,491	236,150,586
2031	137,720,823	(1,916,250)	16,935,000	4,177,250	21,112,250	156,916,823	99,647,394	(85,184,644)	33,895,000	12,886,800	46,781,800	61,244,550	14,804,868	232,966,240
2032	156,193,103	(6,106,250)	3,500,000	3,330,500	6,830,500	156,917,353	52,581,669	(18,007,919)	1,505,000	11,192,050	12,697,050	47,270,800	14,606,906	218,795,059
2033	156,057,413	(22,962,000)	20,670,000	3,155,500	23,825,500	156,920,913	52,317,919	(18,004,419)	4,750,000	11,116,800	15,866,800	50,180,300	14,612,812	221,714,025
2034	26,869,163	-	42,440,000	2,122,000	44,562,000	71,431,163	185,936,419	(74,746,169)	19,245,000	10,926,800	30,171,800	141,362,050	14,615,594	227,408,806
2035	26,761,488	-	-	-	-	26,761,488	185,984,950	(60,749,700)	50,580,000	10,157,000	60,737,000	185,972,250	13,892,625	226,626,363
2036	26,645,388	-	-	-	-	26,645,388	186,047,950	(160,202,200)	152,560,000	7,628,000	160,188,000	186,033,750	9,839,344	222,518,481
2037	132,256,388	-	-	-	-	132,256,388	-	=	=	-	-	-	5,171,750	137,428,137
2038	132,253,288	-	-	-	-	132,253,288	-	=	=	-	-	-	4,867,531	137,120,819
2039	132,254,275	-	-	-	-	132,254,275	-	-	-	-	-	-	2,629,125	134,883,400
2040	34,799,000	-	-	-	-	34,799,000	-	=	=	-	-	-	-	34,799,000
2041	34,795,250	-	-	-	-	34,795,250	-	=	=	-	-	-	-	34,795,250
2042	34,793,500	-	-	-	-	34,793,500	-	=	=	-	-	-	-	34,793,500
2043	34,795,250	-	-	-	-	34,795,250	-	-	-	-	-	-	-	34,795,250
2044	34,581,750	-	-	-	-	34,581,750	-	-	-	-	-	-	-	34,581,750
	\$3,109,091,468	\$ (83,792,208)	\$ 126,105,000	\$ 95,143,558	\$ 221,248,558	\$3,246,547,818	\$1,641,101,013	\$ (818,802,527)	\$ 295,190,000	\$ 262,445,628	\$ 557,635,628	\$1,379,934,114	\$ 640,032,302	\$ 5,266,514,234

⁽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⁾ Interest on unhedged Senior Series 2006D (Tax-Exempt Floating Rate) calculated at 1.85%.

⁽⁴⁾ 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.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 SEWER SYSTEM

The major components of the Regional Sewer System include the wastewater treatment plant and a conveyance system consisting of eight combined sewer overflow facilities, five sewage lift stations and three interceptors, and certain major trunk and lateral sewers. All of the Regional Sewer System facilities are located in the City of Detroit. The Authority believes that the Regional Sewer System is adequate to meet the current needs of customers and to meet the current federal requirements of the EPA under the Clean Water Act. Some repairs, replacements and major improvements are necessary to improve operations and ensure continued compliance with environmental standards. The flow of wastewater is monitored and remotely controlled by the System Control Center, which allows the Authority to remotely control most conveyance system facilities.

The Wastewater Treatment Plant

The wastewater treatment plant (the "Plant") is one of the largest single site wastewater treatment plants in the United States. The Plant currently treats a daily wastewater flow that has averaged 670 million gallons per day ("mgd") over the past five years. The Plant services the needs of approximately 30% of the State's population.

Major treatment processes at the Plant include raw wastewater pumping and preliminary treatment (grit removal, screening and chemical addition) of the incoming wastewater; primary clarifiers, to remove material suspended in the wastewater; gravity thickening of the solids, solids dewatering using belt filter presses and centrifuges, and final solids disposal using a combination of incineration, landfilling and land application; and disinfection of the final effluent using chlorination to kill harmful bacteria followed by dechlorination to remove chlorine from the water prior to discharge.

In March 2012, DWSD convened a symposium of industry and academic experts in biosolids management to address the historical challenges associated with solids management primarily due to aged infrastructure. The symposium resulted in recommendations to construct a biosolids dryer facility ("BDF"), to manage biosolids peaks with land application, land-filling and incineration, to retire Complex I incinerators, and to bring Complex II incinerators into air quality compliance. The BDF project was designed to comply with 2016 changes in air quality regulations.

The BDF was constructed using a contract and a public-private partnership where a private company, New England Fertilizer Company ("NEFCO"), designed, built, operates and maintains the BDF facility for a period of 20 years. Testing of the BDF facility in late 2015 demonstrated that the BDF facility was not able to meet the required production throughput. GLWA and NEFCO then entered into an interim operating agreement which allowed the facility to be put into service with a reduced production allowance, financial penalties and corrective action to be completed by December 31, 2016. The first seven months of operation in 2016 revealed two additional process deficiencies relating to (1) the noncompliance with sulfur dioxide emissions requirements and (2) the design of certain mechanical components. NEFCO has undertaken an aggressive and robust program to correct both deficiencies. Currently, NEFCO appears to be on target to address these deficiencies in order to operate the BDF at its fully functional capacity by the agreed date of December 31, 2016.

When the BDF is operating at its fully functional capacity, it is expected to provide additional solids handling capability sufficient to meet 70% of the average daily solids load. Once the BDF is fully incorporated into the treatment process, in addition to cost savings, the results will include operational reliability, reduced reliance on Complex II incinerators, an improved management of peak biosolids, and preservation of landfill capacity, reduced trucking, odors and noise, and the production of an environmentally beneficial use for biosolids.

Conveyance System

The wastewater conveyance system consists of a network of sewers and sewage lift stations which collect and transport wastewater to the Plant. During wet weather, additional wet weather capture and treatment facilities, called combined sewer overflow ("CSO") control facilities, are also utilized. The conveyance system currently has a total service area of approximately 988 square miles and serves 77 communities including the City of Detroit.

THE MASTER PLAN AND THE CAPITAL IMPROVEMENT PLAN

Regional Sewer System Master Plan

The current Wastewater Master Plan, dated October 2003 (the "Wastewater Master Plan"), established that the Plant and conveyance system have sufficient capacity to serve the existing service area and a modest amount of growth. Since the Wastewater Master Plan was completed in 2003, there has been little growth in Southeast Michigan and Plant flows have been relatively steady, fluctuating based on climatological conditions. The Authority is currently in the process of initiating an update to the 2003

Wastewater Master Plan and is implementing a reliability-centered asset management program, both of which are designed to refine future long-term CIPs.

The update to the 2003 Wastewater Master Plan is intended to address the needs of the Regional Sewer System and customer usage projections over the next 40 years. As a part of this update, the Authority is developing system modeling capabilities which will take into account water quality, hydrologic, hydraulic, surface water and wastewater treatment. This system modeling capability will assist in developing alternative uses of existing linear infrastructure, creative approaches to the expansion of the use of existing facilities and wet weather operations, and strategic use of green infrastructure.

The update to the 2003 Wastewater Master Plan involves collaboration with regional stakeholders such as MDEQ, watershed groups and universities. The master planning process is expected to take approximately 36 months from commencement. The Authority is currently evaluating proposals and oral presentations from multiple consulting teams that have responded to the solicitation.

Capital Improvement Program and CIP Planning Process

The Fiscal Year 2017 Regional Sewer 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 recognition of the possibility that the upcoming master plan update may result in additional expenditures in the later years of the five-year planning period, the projected expenditure schedule of projects in the following table include an allowance for future projects in Fiscal Year 2021.

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Regional Sewer System Capital Improvement Plan Projected Expenditure Schedule – Fiscal Years 2017 through 2021

	Fiscal Year Ending June 30,						
Category	2017	2018	<u>2019</u>	2020	2021	<u>Total</u>	
	\$	\$	\$	\$	\$	\$	
Wastewater Treatment							
Primary Treatment	22,576,000	24,790,000	26,900,000	14,538,000	2,679,000	91,483,000	
Secondary Treatment	5,767,000	8,593,000	5,600,000	0	0	19,960,000	
Solids Handling	17,751,000	9,900,000	8,250,000	5,770,000	0	41,671,000	
Disinfection	6,155,000	13,350,000	15,550,000	5,750,000	0	40,805,000	
General Wastewater Trtmt	29,454,000	29,196,000	33,550,000	30,950,000	20,750,000	143,900,000	
Subtotal Treatment	81,703,000	85,829,000	89,850,000	57,008,000	23,429,000	337,819,000	
Wastewater Collection							
Regional Sewer System	22,110,000	25,050,000	19,250,000	31,000,000	22,700,000	120,110,000	
Combined Sewer System	1,000,000	1,500,000	1,750,000	3,000,000	0	7,250,000	
Wastewater Lift Stations	14,000,000	25,500,000	28,640,000	17,700,000	8,000,000	93,840,000	
Subtotal Collection	37,110,000	52,050,000	49,640,000	51,700,000	30,700,000	221,200,000	
Information Technology	6,242,000	8,123,000	5,425,000	1,000,000	1,050,000	21,840,000	
General Purpose	3,918,000	1,892,000	155,000	0	0	5,965,000	
Allowance for Future Projects	0	0	0	0	69,821,000	69,821,000	
Subtotal General	10,160,000	10,015,000	5,580,000	1,000,000	70,871,000	97,626,000	
TOTAL	128,973,000	147,894,000	145,070,000	109,708,000	125,000,000	656,645,000	

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 Regional Sewer System CIP is estimated to cost \$656,645,000. The Series 2016 Bonds are entirely refunding bonds and are not being issued to provide any capital improvement financing. The Authority recently issued in September Junior Lien Bonds through the State Water Pollution Control Revolving Fund ("SRF") to finance approximately \$70.6 million of CIP expenditures for capital improvements to the Regional Sewer System. These Junior Lien Bonds are reflected in the following table. The Authority expects that approximately \$282 million (net amount) 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, augmented by Sewer System revenues. The SRF proceeds included in the financing plan only include proceeds from loans that are already issued or formally in progress. The Additional Bonds projected in this financing plan do not include any proceeds to finance expenditures for the DWSD Local Sewer System. To the extent that DWSD opts to pursue financing of Local Sewer System projects through Additional Bonds of the Authority, these projections would change. See APPENDIX I – FEASIBILITY CONSULTANT'S REPORT.

Regional Sewer System Capital Improvement Plan Projected Funding Sources

	Fiscal Year Ending June 30,							
	2017	2018	<u>2019</u>	2020	2021	<u>Total</u>		
	\$	\$	\$	\$	\$	\$		
Existing Improvement and Extension Funds (a)	92,000,000					92,000,000		
Existing Construction Funds (a)	100,000,000					100,000,000		
Current Revenues	28,380,400	36,926,400	43,914,800	52,083,300	70,446,500	231,751,400		
Bond Proceeds (b)	421,295,000	150,000,000	0	150,000,000	0	721,295,000		
Original Issue Premium	61,172,700					61,172,700		
Available Debt Service Payment Funds	10,416,900					10,416,900		
Available Debt Service Reserve Funds	23,824,400					23,824,400		
less: Defeasance Requrements for Refunded Bonds	(514,338,400)	0	0	0	0	(514,338,400)		
less: Deposit to DWSD Construction Fund	0	0	0	0	0	0		
less: Bond Reserve Requirements (c)	0	(8,100,000)	0	(8,100,000)	0	(16,200,000)		
less: Issuance Expenses (d)	(2,370,600)	(900,000)	0	(900,000)	<u>0</u>	(4,170,600)		
Net Bond Proceeds Available	0	141,000,000	$\overline{0}$	141,000,000	$\overline{0}$	282,000,000		
State Clean Water Revolving Fund Loans	40,648,000	35,300,000	21,165,000	<u>0</u>	0	97,113,000		
Total Funding Sources (e)	261,028,400	213,226,400	65,079,800	193,083,300	70,446,500	802,864,400		

- (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 2018 and 2020
- (c) Includes amount required from future bond proceeds to fund debt service reserve fund.
- (d) Includes Underwriter's Discount and Bond Insurance premium.
- (e) 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 Sewer System does not generate sufficient Revenues to pay for the cost of capital improvements to the Regional Sewer 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 Sewer 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 sewage collection, treatment, and disposal services in a service area encompassing 850 square miles. The Sewer System currently serves an area of 988 square miles located in three Michigan counties and an estimated population of nearly 2.8 million or approximately 28% of Michigan's population. Suburban customers comprise approximately 75% of the population served by the Authority, and the Retail Sewer Customers comprise the remainder served by the Authority. 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.

Historical Wastewater Volumes

The treated wastewater volumes have not changed materially during the last ten years largely due to the fact that only about one-third of the treated wastewater volumes are related to sanitary volumes that result from customer water use. The majority of treated wastewater volumes are related to the infiltration into the sewer system, or the runoff into the combined sewer system, of wet weather flows. The volatility of wet weather events can dramatically affect the level of flow received at the Plant, irrespective of population levels or water use patterns.

Prior to the Rate Simplification Initiative (as defined herein), the billed wastewater volumes for wholesale customers were affected by wet weather events because billed volumes for the majority of these customers were based on metered wastewater volumes. These customers are no longer billed based on wastewater volumes. Under the now-fully implemented Rate Simplification Initiative, bills are issued in equal monthly amounts, regardless of metered wastewater contributions. The Authority continues to meter and monitor contributed wastewater volumes from these customers, in order to understand flows in the system and to collect data for future cost allocation analyses. Billed volumes for retail customers are based on metered water volumes. The following table shows treated and estimated wastewater volumes from Customers during the past ten Fiscal Years. The 2010 census estimates the suburban wholesale service population at 2,093,000 and the Detroit retail population at 714,000.

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Regional Sewer System Treated and Metered Wastewater Volumes

	Annual	Metered Customer Volume						
Fiscal	Wastewater	Suburban	Detroit					
Year	Treated	Wholesale (a)	Retail (b)	<u>Total</u>				
	mg	mg	mg	mg				
2007	240,400	117,500	32,400	149,900				
2008	244,200	114,200	27,800	142,000				
2009	260,800	123,200	29,600	152,800				
2010	221,400	100,600	27,100	127,700				
2011	253,500	112,700	28,000	140,700				
2012	255,500	112,600	24,900	137,500				
2013	220,600	99,400	23,100	122,500				
2014	233,200	107,200	22,100	129,300				
2015	222,700	103,700	20,100	123,800				
2016	209,200	96,800	20,600	117,400				

mg = millions of gallons

- (a) Primarily metered wastewater volumes, but also includes water sales volumes for some customers whose wastewater is not metered. For 2015 and 2016, reflects volumes measured and monitored, but not billed.
- (b) Reported water sales to retail customers

Wholesale Customers

The Customers of the Regional Sewer System include 76 communities served through 18 wholesale sewer service contracts with municipal and other public entity Customers, as well as the City, which is served by the Authority pursuant to the Water and Sewer Services Agreement. The Regional Sewer System receives wastewater from its wholesale customers at its interceptor sewer system, generally delivered at the boundaries of the City. The quantity of wastewater discharged by the wholesale customers into the Regional Sewer System is measured with a sewage meter or estimated on the basis of water consumption and other factors. In all cases, wholesale customers and lower-tiered service providers are responsible for the construction and maintenance of their own internal sewerage systems for collecting the wastewater and delivering it to the Regional Sewer System.

Wholesale Contracts

<u>Customers on 30-year Model Contract</u>. As part of a partnering process, the Authority worked with its wholesale customers over a period of several years to develop a new model contract with standardized contract language. This model contract ensures that all wholesale customers are treated uniformly and equitably and provides the Authority with the same rights and controls across all agreements. The model contract language addresses items such as monthly billing, contract term lengths, contract renewal, flow limitations, flow enforcement provisions, flow measurement, regulatory compliance, connection points and contract enforcement. The agreements generally include other provisions required for orderly operation of the Regional Sewer System such as: (i) restrictions on the collection of wastewater from outside the service area of the wholesale customer without the consent of the Authority; (ii) metering for all new customers and for most other customers; and (iii) acceptance by wholesale customers of the State's water quality standards and of appropriate ordinances for meeting the

pollution control standards imposed by the State and federal government. Wholesale customers are billed on a monthly basis in accordance with the Rate Simplification Initiative.

Using this model contract, the Regional System established a new contract for the Oakland Macomb Interceptor District in 2009. In 2012, the Regional System and its wholesale customers began negotiations on the development of a new rate methodology referred to as the "Rate Simplification Initiative." In November 2013, the negotiations concluded and the model contract was amended to incorporate the new Rate Simplification Initiative terms. In 2014 and 2015, 10 additional wholesale customers including Redford Township and the cities of Allen Park, Center Line, Dearborn, Farmington, Grosse Pointe, Grosse Pointe Park, Hamtramck, Harper Woods and Melvindale executed new 30-year model contracts. The Authority is currently using the model contract, inclusive of the new Rate Simplification Initiative modifications, as it negotiates new contracts with its remaining seven wholesale customers.

Customers not on Model Contract. Each of the seven wholesale customers not yet utilizing the model contract has executed an agreement with the Authority for an initial term ranging from ten years to an indefinite duration. The agreements executed prior to 1963 without an indefinite duration have typically passed their initial term, and most of such agreements provide for automatic renewal terms or renewal terms upon the consent of the parties. As reflected on the following table entitled "Wholesale Sewage Treatment Contracts", certain wholesale agreements that require renewal upon the consent of the parties have not been formally renewed, but the parties to such contracts continue to perform in accordance with the terms of the contracts. The agreements have notice requirements for termination after the initial term of the contract, from one to three years for any reason and from sixty days to ninety days for cause. The agreements typically may also be terminated by mutual consent of the parties. Under the typical agreement, the Authority, subject to certain terms and conditions, is obligated to receive and provide treatment for the wastewater from the wholesale customers at designated points of connection. The wholesale customer is required to pay for treatment of all wastewater delivered to the Regional Sewer System at rates related to the cost incurred in providing the service. Negotiations with the remaining seven wholesale customers continue. Until such time as the model contracts are executed, the agreements currently in effect will govern the relationship between the Authority and the wholesale customers.

Wholesale Customer Information

Approximately 50% of the Sewer System's operating revenues for the Fiscal Year ended June 30, 2015, were derived from wholesale customers (including charges for industrial surcharges and industrial waste control services) and the balance from retail customers and miscellaneous other income sources. The following table lists the Authority's wholesale Customers as of the date of this Official Statement, the date of initiation of service with the Regional Sewer System and various details of the contracts.

Wholesale Sewage Treatment Contracts

	Total Metered Flow Mcf FY 2015 (2) Mcf	Total Billed Revenue FY 2015 (1)	Contract <u>Date</u>	Term of Contract
Oakland Macomb Interceptor District	3,387,783	74,863,200	2009	30 years
Wayne County - Rouge Valley	2,888,695	50,934,000	1961	(4)(7)
Oakland County - George W. Kuhn Drain District	2,649,758	42,050,400	1962	(4)(7)
Oakland County - Evergreen Farmington District	1,808,374	29,689,200	1958	(4)
Wayne County - Northeast	1,345,679	22,587,600	1961	(4)
Dearborn	1,006,680	18,058,800	2015	30 years
Highland Park (3)	N/A	5,569,200	N/A (6)	
Hamtramck	N/A	4,054,800	2014	30 years
Grosse Pointe Farms	140,672	2,449,200	1941	(5)
Grosse Pointe Park	106,652	1,465,200	2014	30 years
Melvindale	75,884	1,292,400	2014	30 years
Farmington	79,245	1,032,000	2014	30 years
Center Line	47,618	872,400	2014	30 years
Grosse Pointe	N/A	834,000	2014	30 years
Allen Park	44,511	646,800	2015	30 years
Harper Woods	N/A	247,200	2014	30 years
Redford Twp	N/A	249,600	2014	30 years
Wayne County #3	N/A	57,600	1950	(4)

Mcf = Thousand cubic feet.

- (1) Billed revenue does not include surcharges to wholesale area industrial users for pollutant discharges in excess of the local ordinance limits or Industrial Waste Control charges.
- (2) For 2015, reflects metered wastewater monitored for cost allocation purposes, not billed flow.
- (3) Account currently showing delinquent balances.
- (4) Minimum term expired; automatic renewal may be canceled with one year's notice.
- (5) Duration is indefinite with no initial term. Contracts with indefinite term are generally terminable either by mutual consent or within a specified period after a notice of termination has been given.
- (6) 1982 Amendment indicates that the parties are guided in their legal relationship by a Michigan Supreme Court decision from 1949.
- (7) Contract indicates that renewal is by mutual agreement of the parties. Although no formal written renewal is in place, the parties' course of conduct has been to recognize the continuing enforceability of the contract.

Service Charges to Customers

The Authority's sewer service charges and charges to Retail Sewer Customers under the Water and Sewer Services Agreement are reviewed and adjusted annually. Recently, the wholesale service charge methodology was modified to consist entirely of fixed monthly charges, and to stabilize relative customer cost responsibility for multiple year service charge periods. These modifications were originally implemented as part of a "Rate Simplification Initiative" effective with the Fiscal Year 2015 service charges. See "SERVICE AREA AND CUSTOMERS – Wholesale Customers" and APPENDIX I – FEASIBILITY CONSULTANT'S REPORT – "Rate Simplification Initiative."

The cost allocation and charge development approach established by the Rate Simplification Initiative was continued for the Fiscal Year 2017 wholesale sewer service charges and charges to Retail Sewer 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 4.9% more revenue than the previous year's wholesale service charge. This revenue adjustment for Fiscal Year 2017 represents a 4.0% increase in the overall budget, and an additional amount to address recovery

of two separate amounts related to bad debt associated with Highland Park. Charges to suburban wholesale Customers include approximately \$5.6 million related to projected bad debt expense (assuming no recovery from Highland Park) during Fiscal Year 2017, and approximately \$3.46 million related to bad debt expense true-up adjustments for Fiscal Years 2013 through 2015.

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 sewer service charges for the last ten years.

Change in Effective Wholesale Sewer Service Charges

	Average
Date of	Annual
Implementation	Increase
7/11/2007	0.0%
9/3/2008	2.5%
7/1/2009	8.2%
7/1/2010	3.7%
7/1/2011	11.0%
7/1/2012	6.7%
7/1/2013	3.7%
7/1/2014	2.8%
7/9/2015	-1.1%
7/1/2016	4.9%

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 sewage disposal service provider of choice and seeks to work in partnership with its customers to deliver the highest quality 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 a partnering process structured through a Steering Committee, a mechanism embedded in the GLWA's model sewer service 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 Steering Committee 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 the 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

In recent years, the Sewer System has continued to show improved compliance with applicable laws and regulations as it has continued to optimize its operations at the wastewater plant. Optimization has also benefited the environment as the treated water discharged from the wastewater plant is often cleaner than the surrounding water in the receiving body.

The operation of the Sewer System is subject to extensive regulation pursuant to the federal Clean Water Act, the Clean Air 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 Sewer System including the quality and quantity of wastewater discharged, monitoring and reporting requirements, the process for disposing biosolids, design, construction and operation of treatment and collection facilities, and the handling, storage, and management of hazardous materials and hazardous wastes. These Federal, state and local standards and procedures that regulate the environmental impact of the Sewer System are subject to change. These changes may arise from continuing legislative, regulatory and judicial action regarding such standards and procedures.

Included in the regulatory framework established by the Clean Water Act is the National Pollutant Discharge Elimination System ("NPDES") permit program, which requires operation of wastewater treatment facilities according to discharge limitations and other requirements, set forth in a permit. The Authority and the City are co-permittees of an NPDES permit. The NPDES permit program is administered by the EPA through the MDEQ. The Sewer System's current NPDES permit expires on October 1, 2017. The NPDES permit includes compliance schedules for several capital improvement projects relating to the control of CSOs consistent with the Department's Long-Term CSO Control Plan (the "CSO Control Plan"). The Authority is generally in compliance with the permit deadlines.

Because the Plant is not designed to remove cadmium, copper, lead, PCBs, mercury, or other toxic materials to the levels required by the MDEQ, these substances are controlled primarily through the Industrial Pretreatment Program ("IPP"). The NPDES permit incorporates requirements that the City administer the IPP to control and regulate wastewater discharged to the Sewage Disposal System by

industrial users, including the adoption of local limits for various pollutants. The Authority currently operates the IPP as the Agent of the City. Consistent with the Lease, the Authority operates the IPP as the City's agent and is required to "use its best efforts to submit an approvable industrial pretreatment program to the MDEQ by October 1, 2017."

As an NPDES co-permittee with the City, the Authority has been added as an additional party to and will be bound by the requirements of the Administrative Consent Order previously entered into by the City and the MDEQ on July 8, 2011. This Administrative Consent Order requires the Authority to implement certain corrective measures to provide reliable capacity to process and dispose of biosolids. The Administrative Consent Order also identifies a series of additional corrective measures to be undertaken by the Department. The Administrative Consent Order specifies the timetable for completing activities relating to dewatering, conveyance, disposal, maintenance and other related items.

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 Sewer 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.

Except as noted in this section, the Authority has not been served with or is aware of any litigation, notices of violation, orders, claims, citations, complaints, penalty assessments, suits or other environmental proceedings ("Environmental Proceedings") begun by environmental regulators which may have a material impact on GLWA's operations and, to the best of GLWA's knowledge, there are no threatened Environmental Proceedings which could have a material adverse impact on GLWA's operations.

March 4, 2016, Fire Event. On March 4, 2016, a fire occurred in the "Incineration Complex 2" building of the Authority's Wastewater Treatment Plant. Although the fire was quickly extinguished it caused substantial damage to the facility. As a result of the fire, the belt filter presses and incinerators located within this facility were rendered temporarily inoperable.

The Authority has insurance coverage in place and is working with its carrier to adjust the loss. As of September 1, 2016, the Authority's carrier has advanced \$7 million to help defray the Authority's costs associated with remediation and repair of the facilities. The Complex 2 facility has been repainted, electrical service has been repaired, and the belt filter presses located within the facility are now fully operational. Repair efforts are now focused on repairs to the sludge conveyor system located within the facility, the roof, and the incinerators.

The Authority has received a Notice of Violation (the "Violation"), SRN B2103, associated with the inoperability of the Complex 2 incinerators. With the Complex 2 incinerators inoperable, the Authority has been required to continue to use Complex 1 incinerators that were scheduled to be retired on March 1, 2016 in anticipation of new EPA air quality regulations that took effect on March 20, 2016. (The Complex 2 incinerators had been updated to meet the Maximum Achievable Control Technology standards required by these new regulations.) The Violation relates to its continued use of the Complex 1 incinerators. On August 2, 2016, the Authority met with regulatory officials to discuss the nature and scope of the Violation. The Authority indicated its continuing need to have the Complex 1 incinerators on-line and available for service until the repairs and testing of the Complex 2 incinerators is completed in early 2017. The Authority outlined its operating protocols to minimize the environmental impact of this continued operation indicating that the Complex 1 incinerators are only to be used as a last resort and

according to the following protocol: (1) drying at the Biosolids Drying Facility followed by land application of class A solids, (2) land application of class B solids, (3) landfill (within daily permit limits) (4) incineration and (5) onsite storage. Finally, the Authority asked that any fines or penalties to be assessed associated with the Violation be reduced or eliminated based upon the Authority's mitigation efforts. The Authority is awaiting further response from the MDEQ regarding the Violation and the information presented at this meeting.

Notice of Violation – Administrative Consent Order – Wastewater Treatment Plant. The Administrative Consent Order governing the Authority's operations provides for a staffing level of 441 FTEs at the Wastewater Treatment Plant and requires the Authority to maintain a minimum staffing level of at least 95% of that number (419 FTEs). In anticipation of the Biosolids Drying Facility beginning operations and in recognition of its ongoing optimization efforts, the Authority requested a reduction in the staffing level to align with this operational change. Prior to responding to this request, the MDEQ issued a Notice of Violation, VN 006417, regarding such staffing levels. The Authority and MDEQ met during September, 2016 to discuss the revised staffing plan. Based upon the encouraging nature of those discussions, on September 27, 2016 the Authority formally requested that the revised staffing plan be accepted and the Notice of Violation be dismissed. On September 29, 2016, the Authority was advised by MDEQ of its intent to clear the violation based upon the material submitted by the Authority. The Authority continues to believe that it has at all times been in good faith compliance with the staffing provisions of its administrative consent order and will continue its efforts to maintain compliance.

Affordability Waiver. The median household income within the City is approximately \$27,000, and roughly 38% of the City's residents live below the poverty line. Although the City's rates for wastewater treatment are below the national average, the per household cost of wastewater treatment totals approximately 2.6% of the median Detroit household's income. The traditional guideline for affordability is 2% of the community's median household income.

MDEQ has granted the Authority and the Department, as co-permittees, an affordability waiver under the NPDES permit issued in 2012 for the next two five-year permit cycles, thereby allowing flexibility in the schedule for implementing previously planned CSO construction. During these two permit periods, the Department and MDEQ have agreed to focus on implementation of "green infrastructure" solutions and use of operational flexibility to reduce untreated CSO discharges. Evaluations will be completed during the ten-year period to determine the next steps to address CSO solutions.

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 Sewer System, all cash balances and investments (except for one month's operations and maintenance expense for the Local Sewer 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 Sewer 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 Sewer Fund held investments with a total market value of approximately \$456,166,714 and the longest investment had a maturity date of April 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 August 31, 2016, the City of Highland Park was the only wholesale customer with a past due balance. Of the total balance past due of \$27.0 million, \$25.6 million is for sewer service charges and \$1.4 is for Industrial Waste Control ("IWC") charges. 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 is 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 Sewer System. The Authority has been able to meet its obligations as they come due. For a discussion of the Authority's approach to setting its service charges to suburban wholesale customers in a manner that includes recovery of bad debt expenses related to Highland Park, see APPENDIX I - FEASIBILITY CONSULTANT'S REPORT.

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 Sewer 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 Sewer 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 Sewer Facilities and such additional amounts as may be necessary to satisfy the Rate Covenant.

The Lease provides that the Regional Sewer 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 Sewer 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 \$27,500,000 per year (the "Lease Payment"), which is funded from a portion of the common-to-all revenue requirements for the Regional Sewer System. The 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 Sewer 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 Sewer System improvements or Local Sewer 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 nonvested 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 Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer Revenues are derived from audited financial statements of the DWSD Sewer 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 Sewer System Revenues and Expenses For Fiscal Years 2011-2015

		Fiscal Year Ending June 30,					
	_	<u>2011</u>	<u>2012</u>	2013	<u>2014</u>	2015	
		\$	\$	\$	\$	\$	
1 2 3	Operating Revenues Wholesale Service Revenue (a) Retail Service Revenue (a) Industrial Specific Service Revenue (a)	219,126,517 166,951,437 20,732,217	245,449,282 164,334,364 22,747,141	219,727,266 190,846,578 26,665,498	237,872,420 205,194,262 28,120,103	239,652,309 232,382,278 28,652,916	
4	Subtotal Service Revenue	406,810,172	432,530,787	437,239,342	471,186,785	500,687,503	
5 6	Miscellaneous Revenue Non-Operating Revenue (b)	3,908,904 3,248,513	5,124,102 6,816,034	3,623,918 (200,183)	4,584,059 4,157,781	4,984,109 1,231,253	
7	Total Revenue	413,967,589	444,470,922	440,663,077	479,928,625	506,902,865	
8	Operation and Maintenance Expenses (c)	230,810,741	217,023,586	209,785,080	206,051,510	195,078,672	
9	Net Revenues	183,156,847	227,447,336	230,877,997	273,877,115	311,824,193	
10 11 12	Debt Service Requirements Senior Lien Bonds Senior and Second Lien Bonds All Bonds, Including SRF Junior Lien	113,234,500 173,189,300 209,063,900	104,581,000 166,788,600 203,092,300	133,476,800 188,444,100 225,222,900	129,960,800 193,042,800 229,611,100	132,540,700 195,421,400 232,612,800	
13 14 15 16	Net Revenues After Debt Service Pension Obligation Certificates Transfers to Pension Obligation Payment Fund Professional Service Fees - Detroit Bankruptcy	(25,907,053) 5,896,300 NA NA	24,355,036 6,232,100 NA NA	5,655,097 6,568,200 <i>NA</i> <i>NA</i>	44,266,015 6,232,100 NA NA	79,211,393 NA 13,167,200 15,548,100	
17	Net Available for Other Purposes	(31,803,353)	18,122,936	(913,103)	38,033,915	50,496,093	
18 19 20	Rate Covenant Debt Service Coverage (d) Senior Lien Bonds Senior and Second Lien Bonds All Bonds, Including SRF Junior Lien	1.62 1.06 0.88	2.17 1.36 1.12	1.73 1.23 1.03	2.11 1.42 1.19	2.35 1.60 1.34	
(b)	Net of bad debt expense Excludes non-cash items such as changes in de Adjusted to only reflect elements that impact ne				<i>.</i>		
	Operation and Maintenance Expense As Reported on Financial Statements less: Net OPEB obligation less: Nonrecurring capital asset adjustments plus: Prior period pension adjustment	247,249,767 (12,751,799) (3,687,227) NA	232,355,828 (13,632,242) (1,700,000) NA	260,364,330 (13,609,015) (36,970,235) NA	229,169,256 (1,121,642) (21,996,104) NA	168,158,529 NA (2,313,365) 15,533,508	
25 26	Subtotal O&M for 'normal "cash" operations Deposit to Pension Obligation O&M Fund	230,810,741 NA	217,023,586 NA	209,785,080 NA	206,051,510 NA	181,378,672 13,700,000	
27	Total O&M for Net Revenues	230,810,741	217,023,586	209,785,080	206,051,510	195,078,672	
(d)	Computed consistent with Rate Covenant basis	for rate determi	nation purposes.	Not applicable fo	or purposes of A	dditional	

Fiscal Year 2011-2015 Operations

Bonds Test calculations.

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

Revenues

As indicated in the above table, Sewer System revenues from service charges, net of bad debt expense, have increased approximately \$94 million, or 23%, since Fiscal Year 2011. This increase is

primarily attributable to increases in charges during that period, as billable sales units declined 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 towards a service charge structure that consists entirely of fixed monthly charges, effective with the Fiscal Year 2015 service charges. See "SERVICE AREA AND CUSTOMERS – Wholesale Customers" and APPENDIX I – FEASIBILITY CONSULTANT'S REPORT – "Rate Simplification Initiative."

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 \$28 million in Fiscal Year 2015. Approximately \$12 million of this figure is related to recognition of the Highland Park delinquency. The Fiscal Year 2015 financial statements reflect a more conservative assumption regarding collection of outstanding balances than prior financial statements, resulting in bad debt expense offsets against suburban wholesale revenues that reflected over two years of annual billings to Highland Park. The corresponding bad debt expense figures for Fiscal Years 2011, 2012, 2013 and 2014 were approximately \$25 million, \$36 million, \$39 million and \$41 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 8 in the table are intended to represent actual annual transfers to the Operation and Maintenance Fund to fund the costs of operating the Sewer 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 21 through 27. 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; and
- 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 8 have declined significantly over the past four years, and were over \$35 million (over 15%) lower in Fiscal Year 2015 than in Fiscal Year 2011. 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 Sewer 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, and below 1.0 for all 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 Sewer 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 a result of lower than anticipated billable wastewater volumes.

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 2015. See "SERVICE AREA AND CUSTOMERS – Wholesale Customers" and APPENDIX I – FEASIBILITY CONSULTANT'S REPORT – "Rate Simplification Initiative."

Liquidity

Sewer 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.

Sewer System Days Cash

Fiscal Year	Cash & Equivalents ^{(a)(b)}	Operation & Maintenance Expenses ^(b)	Days Cash
2012	\$25.6	\$217.0	43
2013	50.3	209.8	88
2014	116.9	206.1	207
2015	156.2	195.1	292

⁽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 Sewer 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. Sewer 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 Sewer 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.

DWSD/GLWA Sewer System - Fiscal Year 2016 Estimate

		Annual Target	Actual \$	<u>Variance</u> \$	Achieve <u>Pctg</u>
		(a)			
1 2	Revenue Sewer Retail Billings less: Bad Debt Expense	279,245,400 (39,000,000)	267,800,000 (37,500,000)	(11,445,400) 1,500,000	96% 96%
3 4 5	Net Sewer Retail Sewer Wholesale Billings less: Bad Debt Expense	240,245,400 254,124,000 (5,569,200)	230,300,000 254,124,000 (5,569,200)	(9,945,400) 0 0	96% 100% 100%
6 7 8	Net Sewer Wholesale Sewer Industrial Specific Billings less: Bad Debt Expense	248,554,800 18,962,000 0	248,554,800 18,962,000 0	0 0 0	100% 100% 0%
9 10	Net Sewer Industrial Specific Miscellaneous Operating Revenue	18,962,000 5,000,000	18,962,000 4,800,000	(200,000)	100% 96%
11 12	Total Operating Revenue Non-Operating Revenue	512,762,200 2,283,300	502,616,800 2,283,300	(10,145,400)	98% 100%
13	Total Revenue	515,045,500	504,900,100	(10,145,400)	98%
14	Operation and Maintenance Expense (b)	216,693,800	213,700,000	(2,993,800)	99%
15	Net Revenues	298,351,700	291,200,100	(7,151,600)	98%
16 17 18	Debt Service Requirements Senior Lien Bonds Senior and Second Lien Bonds All Bonds, Including SRF Junior Lien	144,633,400 198,840,300 239,442,400	134,501,300 197,405,400 235,250,700	(10,132,100) (1,434,900) (4,191,700)	93% 99% 98%
19 20	Net Revenues After Debt Service Fixed Non-Operating Expense (c)	58,909,300 34,792,200	55,949,400 35,393,000	(2,959,900) 600,800	95% 102%
21	Net Available for Other Purposes	24,117,100	20,556,400	(3,560,700)	85%
22 23 24	Rate Covenant Debt Service Coverage (d) Senior Lien Senior and Second Lien All Bonds, Including SRF Junior Lien	2.06 1.50 1.25	2.17 1.48 1.24	0.10 (0.03) (0.01)	105% 98% 99%
	nual Target reflects Consolidated Budget Ap _l e ration and Maintenance Expense Detail	proved by DWSD B	BOWC, modified by	Final Lease Neg	otiations
1 2	"Regular" O&M expenses Deposit to Pension Obligation O&M Fund	202,993,800 13,700,000	200,000,000 13,700,000	(2,993,800)	99% 100%
3 4	Subtotal O&M for Net Revenues Reverse O&M Pension Obligation Deposit	216,693,800	213,700,000 (13,700,000)	(2,993,800) (13,700,000)	99% 0%
5	Non-recurring capital asset adjustment		(15,700,000)	0	0%
6	TOTAL O&M per financial statements	216,693,800	200,000,000	(16,693,800)	92%
	ed Non-Operating Expense			_	
7	Non-Op Pension Reimbursement	12,200,000	12,200,000	0	100%
8 9	B/C Note Payments Budget Stabilization Fund	1,826,000 5,591,500	2,250,600 5,591,500	424,600 0	123% 100%
10	WRAP Deposit	2,538,800	2,538,800	0	100%
11	Lease Payment Deposit to Retail I&E	7,508,500	7,508,500	0	100%
12	TOTAL	29,664,800	30,089,400	424,600	101%

⁽d) 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 service charge schedule for suburban wholesale Customers continues to reflect the entirely fixed monthly charge format established by the Rate Simplification Initiative. As such, the estimated revenues for this class during Fiscal Year 2016 exactly match the budgeted amounts. Revenues from Retail Sewer Customers are expected to be approximately \$9.9 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 "old" 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 negative variance in revenues is partially offset by the moderate positive estimated variance in operation and maintenance expenses for Fiscal Year 2016, resulting in a moderate negative net revenue variance. Actual debt service is estimated to be slightly lower than budgeted amounts due in part to lower than expected interest charges on variable rate bonds and lower than anticipated draws on CWRF loans. As a result, estimated debt service coverage ratios are expected to be consistent with budgeted levels. 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 21, and are generally either transferred to the Improvement and Extension Fund or maintained as operating reserves. The Fiscal Year 2016 estimate indicates a negative variance of approximately \$3.5 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 \$544.6 million, and includes sewer service charges designed to produce total revenues in the same amount. In addition, the Fiscal Year 2017 service charges to suburban wholesale Customers include recovery of two separate amounts related to bad debt expense associated with Highland Park: approximately \$5.6 million related to projected bad debt expense (assuming no recovery

from Highland Park) during Fiscal Year 2017, and approximately \$3.46 million related to bad debt expense true-up adjustments for Fiscal Years 2013 through 2015. The true-up adjustment for the Fiscal Year 2017 charges had the effect of adding approximately 1.2% to the overall revenue adjustment for the suburban wholesale customer class, resulting in an overall increase of approximately 4.9% compared to the allocated share increase of the budget increase over Fiscal Year 2016, which totaled 3.7%. Similar prospective and true-up bad debt adjustments were applied to the Fiscal Year 2017 revenue requirements allocated to the Detroit retail customer class. See APPENDIX I – FEASIBILITY CONSULTANT'S REPORT – "Rate Simplification Initiative."

The budget contains detailed exhibits regarding the financial plan for the Sewer 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 Sewer 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 Sewer 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,						
	2017	2018	2019	2020	2021		
	\$	\$	\$	\$	\$		
Operating Revenue Under Existing Charges (a) Projected Revenue from Revenue Adjustments (b)	535,468,400	526,961,700	520,835,100	514,776,900	511,628,600		
FY 2018: 5.7%		30,102,300	29,752,300	29,406,300	29,226,400		
FY 2019: 5.3%			29,100,800	28,762,300	28,586,400		
FY 2020: 5.3%				30,162,100	29,977,600		
FY 2021: 4.7%					27,972,000		
Total Projected Revenue from Sewer Charges	535,468,400	557,064,000	579,688,200	603,107,600	627,391,000		
Miscellaneous Operating Revenue	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000		
Projected Non-Operating Revenue	4,115,200	2,751,000	2,719,400	2,796,300	2,949,100		
Total Projected Revenue	544,583,600	564,815,000	587,407,600	610,903,900	635,340,100		
Operation and Maintenance Expense (c)	231,094,300	239,447,900	246,303,700	252,973,100	259,840,400		
Projected Net Revenues	313,489,300	325,367,100	341,103,900	357,930,800	375,499,700		
Senior Lien Debt Service	142,336,400	145,939,300	156,494,600	161,424,200	151,471,500		
Second Lien Debt Service	47,918,700	43,990,200	43,922,700	45,878,900	54,642,200		
CWRF Junior Lien Debt Service	47,574,800	48,266,000	49,676,900	51,374,100	51,567,700		
Total Debt Service (d)	237,829,900	238,195,500	250,094,200	258,677,200	257,681,400		
Projected Senior Lien Debt Service Coverage	220%	223%	218%	222%	248%		
Projected Second Lien Debt Service Coverage	165%	171%	170%	173%	182%		
Projected Total Debt Service Coverage	132%	137%	136%	138%	146%		
Balance for Other Purposes	75,659,400	87,171,600	91,009,700	99,253,600	117,818,300		
Projected Application of Balance							
Transfer to Pension Obligation Payment Fund	14,470,400	14,470,400	14,470,400	14,470,400	14,470,300		
Transfer to WRAP Fund	2,654,600	2,634,800	2,752,900	2,864,700	2,997,100		
Transfer to Budget Stabilization Fund	2,654,000	2,654,000	0	0	0		
Transfer to Extra. Repair and Repl. Fund	0	1,253,000	1,028,400	1,000,400	1,030,100		
Lease Payment - Transfer to Detroit Local I&E	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000		
Maintained as Operating Reserves	0	1,733,000	1,343,200	1,334,800	1,374,300		
Available for Capital Improvements	28,380,400	36,926,400	43,914,800	52,083,300	70,446,500		

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

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 sewer 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.

⁽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 Sewer 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.

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 Labor Order") and 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 Sewer System Capital Improvement Plan

The Department utilizes a five-year Capital Improvement Plan (the "Local CIP" or the "Local Sewer System CIP") to maintain and improve the reliability of the Local Sewer 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 Sewer System serving Wholesale Customers and Retail Customers. Upon the assumption by the Authority of the operation of the Regional Sewer 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 Sewer 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 Sewer 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 Sewer System CIP. The Local Sewer 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 Sewer 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 Sewer 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 Sewer System CIP from the City, the Authority shall ensure that its financial planning and budgeting reflect the foregoing requirements.

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

The Local Sewer 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 Sewer System CIP. Deviations from the Local Sewer 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 Sewer System CIP.

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DWSD Local Sewer System Capital Improvement Plan Projected Funding Sources

	2017	2018	2019	2020	2021	Total
	\$	\$	\$	\$	\$	\$
CIP Financing Requirements	21,403,000	13,875,000	28,793,000	29,993,000	28,240,000	122,304,000
Financing Sources						
DWSD Local I&E Fund						
Beginning Balance (a)	508,500					508,500
Lease Payment from GLWA	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000	137,500,000
Transfers from Revenues	0	0	0	0	0	0
Subtotal	28,008,500	27,500,000	27,500,000	27,500,000	27,500,000	138,008,500
Construction Funds (GLWA Revenue Bonds)						
Beginning Balance	0					0
CWRF Loan Proceeds	0	0	0	0	0	0
Proceeds from GLWA Revenue Bonds	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0
Total Financing Sources	28,008,500	27,500,000	27,500,000	27,500,000	27,500,000	138,008,500
Balance	6,605,500	13,625,000	(1,293,000)	(2,493,000)	(740,000)	15,704,500
Cumulative Balance	6,605,500	20,230,500	18,937,500	16,444,500	15,704,500	

(a) Fiscal Year 2016 Lease Payment

SOURCE: DWSD

The current five-year Local Sewer System CIP is estimated to cost approximately \$122 million. The Department expects that the entire program 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 Sewer 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 Sewer System on March 16, 2016. The approved Fiscal Year 2017 budget contains funding for the City retail customer class allocated share of the Regional Sewer System Revenue Requirements established by the Authority and the entirety of the Local Sewer System Revenue Requirements. The Local Sewer 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 Sewer 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 Sewer System. The Fiscal Year 2017 retail sewer rates and charges for Detroit customers were designed to achieve a maximum rate increase of 3.5% 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 Sewer 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 Sewer System will have to rate increases. Projected operating and financial performance of the Sewer 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 Sewer 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 Sewer 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.

Claims regarding July 8, 2016 and August 15, 2016, wet weather events within the City of Detroit. On July 8, 2016, an extreme rainfall event occurred which caused numerous complaints of basement back-ups within certain neighborhoods on the east side of the City of Detroit located near or adjacent to the Detroit River. GLWA received approximately 800 notice of claims related to these wet weather events. On August 15, 2016, a second rain event occurred. While no individual claim would have a material impact on GLWA's operations or revenues, in the aggregate the amount claimed could be material. On October 14, 2016, GLWA was served with a Summons and Complaint in the case of Gail Beasley v. City of Detroit and Great Lakes Water Authority, WCCC Case No. 16-012602 NZ, which is a class action based upon the July and August rain events. GLWA believes that the Sewer System was appropriately designed and that these wet weather events were of an intensity greater than system's design standards, and is confident in its ability to appropriately address these claims and defend the litigation.

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 Appeals 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.

Claims regarding July 8, 2016 and August 15, 2016 wet weather events within the City of Detroit. On July 8, 2016, an extreme rainfall event occurred which caused numerous complaints of basement back-ups within certain neighborhoods on the east side of the City of Detroit located near or adjacent to the Detroit River. DWSD has received approximately 1,100 notice of claims related to this wet weather event. On August 15, 2016, a second rain event occurred. While no individual claim would have a material impact on DSWD's operations or revenues, in the aggregate the amount claimed could be material. While DWSD has not received service of process, it is aware that a case, captioned as Gail Beasley v. City of Detroit and Great Lakes Water Authority, WCCC Case No. 16-012602 NZ, has been filed as a class action based upon the July and August rain events.

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 2016B Bonds ratings of "A3" (stable outlook), "A-" (positive outlook), and "A" (stable outlook) respectively, and the Series 2016C 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 \$481,183,059.37, which purchase price is equal to the par amount of the Series 2016 Bonds, plus net original issue premium of \$61,172,728.70, and less Underwriters' discount of \$1,284,669.33. 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 Sewer 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 BONDS

Series	Maturity	Par	CUSIP	Call Date
2003B	7/1/2033	\$25,550,000	2512376Q1	7/1/19
2006C	7/1/2017	5,100,000	251237P49	11/14/16
2006C	7/1/2018	4,640,000	251237P56	11/14/16
2012A	7/1/2024	4,035,000	251250AL0	7/1/17
2012A	7/1/2025	8,320,000	251250AM8	7/1/17

SECOND LIEN BONDS

Series	Maturity	Par	CUSIP	Call Date
2001E	7/1/2031	\$134,745,000	2512374R1	7/1/18
2006A	7/1/2036	123,185,000	2512373Z4	7/1/18
2006B	7/1/2017	25,000	251237N33	11/14/16
2006B	7/1/2018	910,000	251237N41	11/14/16
2006B	7/1/2022	4,065,000	251237N58	11/14/16
2006B	7/1/2025	5,500,000	251237N66	11/14/16
2006B	7/1/2033	24,010,000	251237N74	11/14/16
2006B	7/1/2034	39,135,000	251237N82	11/14/16
2006B	7/1/2036	100,920,000	251237N90	11/14/16

APPENDIX I FEASIBILITY CONSULTANT'S REPORT

TFG THE FOSTER GROUP

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BART FOSTER, PRESIDENT

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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 \$126,105,000 Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2016B, and \$295,190,000 Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2016C (collectively, the "Series 2016 Bonds"). The Series 2016 Bonds are being issued 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 sewage disposal service charges, including specific charge methodology, projections of revenues under existing charges, projection of future operation and maintenance expenses, a summary of the Regional Sewer System Capital Improvement Program (the "CIP") for fiscal years 2017 through 2021, CIP financing, the impact of projected revenue requirements on future revenues and sewage disposal 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

Bart Foster President [THIS PAGE INTENTIONALLY LEFT BLANK]

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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 environmental laws governing the discharge of pollutants to the nation's air and waters and the laws of the State of Michigan. 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. Sewage disposal service was provided via operation of the City's sewage disposal system ("the Sewer System") that consisted of both wholesale and retail sewage collection, treatment, and disposal 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 Sewer System (the "Regional Sewer System") that provides service to the wholesale sewer 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 Sewer System that provides sewer service directly to retail customers in the City of Detroit (the "Local Sewer 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 sewer 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 will be utilized to refinance certain outstanding bonds of the Authority. None of the Series 2016 Bonds are designed to generate additional capital financing. The capital improvement program expenditures scheduled in the CIP through at least September 2017 are projected to be financed by available fund balances, draws from loans from the Michigan State Clean Water Revolving Fund ("CWRF"), and internally generated funds. The projections in this report include future bond issues, perhaps as early as September 2017, to finance capital improvement expenditures set forth herein. 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 SEWER SYSTEM SUMMARY

Introduction

The Regional Sewer System consists of a wastewater treatment plant (the "Plant") providing primary and secondary treatment of wastewater and a sewage collection and interceptor main network within the City through which wastewater is conveyed to the Plant for treatment. The Authority's Customers, including the City of Detroit, own and operate their own collection systems and discharge their wastewater into the Regional Sewer System's interceptors.

Service Area

The Authority is responsible for the control and treatment of wastewater from most of southeast Michigan. The Regional Sewer System presently serves an approximately 988 square mile area in Wayne, Oakland, and Macomb Counties. Wholesale sewage collection, treatment, and disposal service is provided to 77 communities, including the City of Detroit. *See map, inside cover.*

Approximately 20 percent of the wholesale Customers service area is served by combined sewer lines, designed to convey both sanitary sewage and storm water drainage to the Authority's wholesale (interceptor) collection system, with the remaining 80% utilizing separate sanitary sewers and storm sewers for drainage. The City of Detroit's local collection system is almost entirely comprised of combined sewers.

The Regional Sewer System currently serves approximately 2.8 million people, or one-third of the population of the State of Michigan, with suburban wholesale customers comprising approximately 75% of the total. *See "Historical Wastewater Volumes."*

Historical Wastewater Volumes

A summary of historical wastewater volumes (reported in thousands of cubic feet – "Mcf") is presented in Table 1. Despite reductions in the service population, the treated wastewater volumes have not changed materially over that time period. This is due in large part to the fact that only about one-third of the treated wastewater volumes are related to sanitary volumes that result from customer water use. The vast majority of treated volumes is related to infiltration into the Sewer System, or to runoff into the combined sewer system of wet weather flows. The volatility of wet weather events can dramatically affect the level of flow received at the Plant, irrespective of population levels or water use patterns.

The table also illustrates metered volumes from Customers during this period. Wastewater contributions from most of the suburban wholesale Customers are measured by wholesale master wastewater meters, although for some customers metering wastewater is not practical due to the complexities of connections to the Regional Sewer System. Wastewater contributions from Customers not served by wholesale master wastewater meters, including the City of Detroit, are estimated based on water production and/or sales data. The "metered" data for these "unmetered" Customers in the table therefore do not contain volumes related to infiltration into the Sewer System, or to runoff into the combined sewer system of wet weather flows.

Table 1 Sewer System Wastewater Volumes

	Annual	Meter	Metered Customer Volume			
	Wastewater	Suburban	Detroit	_		
Year	Treated	Wholesale (a)	Retail (b)	<u>Total</u>		
	Mcf	Mcf	Mcf	Mcf		
2007	32,136,800	15,707,500	4,331,200	20,038,700		
2008	32,644,800	15,266,300	3,716,300	18,982,600		
2009	34,863,900	16,469,400	3,956,900	20,426,400		
2010	29,596,900	13,448,300	3,622,700	17,071,000		
2011	33,888,000	15,065,800	3,743,100	18,808,900		
2012	34,155,400	15,052,400	3,328,600	18,381,100		
2013	29,489,900	13,287,800	3,088,000	16,375,900		
2014	31,174,300	14,329,200	2,949,500	17,284,900		
2015	29,770,700	13,867,200	2,685,000	16,552,200		
2016	27,966,000	12,935,200	2,752,500	15,687,700		

- (a) Primarily metered wastewater volumes, but also includes water sales volumes for some customers whose wastewater is not metered. For 2015 and 2016, reflects volumes measured and monitored, but not billed.
- (b) Reported water sales to retail customers

The metered wholesale contributions from suburban wholesale Customers are largely impacted by wet weather events, and annual fluctuations are to be expected. The reduction in 2015 and 2016 are also partially attributable to investments by a few major Customers to reduce dry weather infiltration in their own collection systems.

Effective with the 2015 wholesale sewer service charges, metered wastewater volumes are no longer used to bill Customers, and therefore no longer impact the financial performance of the Sewer System. See "Rate Simplification Initiative."

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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. The Authority is in the process of initiating a wastewater master plan update and a reliability-centered asset management program, both of which are designed to refine future long-term CIPs. As part of the update efforts, the Authority continues to evaluate the possibility of extending the formal CIP planning period from five years to ten years.

As a result of the dynamic nature of the plan and the continual review efforts it is possible that the CIP expenditures reflected in the table below will continue to change, particularly in the later years of the current five-year planning period. The Authority is not aware of any specific projects that will require additional expenditures, but anticipates that some level of estimated future projects will be included as these initiatives are completed.

A summary of the sewer CIP is presented in Table 2. The CIP is divided into major categories. The Wastewater Treatment categories identify specific functions at the Plant and include Primary Treatment, Secondary Treatment, Solids Handling, Disinfection Facilities, and General Wastewater Treatment. The Wastewater Collection categories include the Regional Sewer System (improvements to interceptor sewers), Combined Sewer System (improvements to combined sewer overflow facilities), and Wastewater Lift Stations. Categories are also included to represent Information Technology and General Purpose projects.

The "Allowance for Future Projects" category in the table consists of an estimated allowance for potential additional projects that may emerge from the master plan update and related planning activities. **Table 2 does not include any capital improvements to the local sewer service facilities owned and managed by DWSD**.

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

		Fisca	l Year Ended Jui	ne 30,		
	2017	2018	2019	2020	2021	<u>Total</u>
	\$	\$	\$	\$	\$	\$
Wastewater Treatment						
Primary Treatment	22,576,000	24,790,000	26,900,000	14,538,000	2,679,000	91,483,000
Secondary Treatment	5,767,000	8,593,000	5,600,000	0	0	19,960,000
Solids Handling	17,751,000	9,900,000	8,250,000	5,770,000	0	41,671,000
Disinfection	6,155,000	13,350,000	15,550,000	5,750,000	0	40,805,000
General Wastewater Trtmt	29,454,000	29,196,000	33,550,000	30,950,000	20,750,000	143,900,000
Subtotal Treatment	81,703,000	85,829,000	89,850,000	57,008,000	23,429,000	337,819,000
Wastewater Collection						
Regional Sewer System	22,110,000	25,050,000	19,250,000	31,000,000	22,700,000	120,110,000
Combined Sewer System	1,000,000	1,500,000	1,750,000	3,000,000	0	7,250,000
Wastewater Lift Stations	14,000,000	25,500,000	28,640,000	17,700,000	8,000,000	93,840,000
Subtotal Collection	37,110,000	52,050,000	49,640,000	51,700,000	30,700,000	221,200,000
Information Technology	6,242,000	8,123,000	5,425,000	1,000,000	1,050,000	21,840,000
General Purpose	3,918,000	1,892,000	155,000	0	0	5,965,000
Allowance for Future Projects	0	0	0	0	69,821,000	69,821,000
Subtotal General	10,160,000	10,015,000	5,580,000	1,000,000	70,871,000	97,626,000
TOTAL	128,973,000	147,894,000	145,070,000	109,708,000	125,000,000	656,645,000

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 will be materially different from those indicated in this Report.

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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 Sewer 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.

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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.

- 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.
- Through 2025, the Sewer (and 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 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 Sewer System's share of the amounts above are \$13.7 million and \$12.2 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 Sewer System and Detroit Local Sewer 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;
 - o Bond and Interest Redemption Funds, in cascading lien order, and including debt service accounts and bond reserve accounts;
 - o Pension Obligation Payment Fund, to provide for funding of the Sewer System's share of the "non-operating portion" of the Pension Obligation and obligation for the B and C Notes;
 - o Water Residential Assistance Program (WRAP) Fund established to provide bill payment assistance to residents throughout the service area;
 - o Budget Stabilization Fund established as a reserve to manage collection performance of the Detroit retail customer class;
 - o Extraordinary Repair and Replacement Reserve Fund established as a reserve to pay the costs of making major unanticipated repairs or replacements;
 - o Improvement and Extension (I&E) Fund established to pay for improvements, enlargements, or extensions; separate subaccounts established for the Regional Sewer System and the Local Sewer System.
 - o Surplus Fund established to accommodate flexibility in managing the overall flow of funds.

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

• An annual Lease Payment of \$50 million (of which the Regional Sewer System's share is \$27.5 million). The Lease Payment is to be deposited into the Local Sewer 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 Sewer 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 Sewer 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

The Authority's sewage disposal service charges are developed to provide sufficient levels of revenue to meet all operation and maintenance expenses of the Sewer System, debt service requirements on obligations issued for the Sewer System, capital improvement expenditures to be funded from current revenues, and other specific bond ordinance and revenue requirements. A schedule of wholesale sewer 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 service requirements.

The general philosophy employed to develop the Authority's wholesale service charges has been consistent for many years. All Customers are proportionally allocated costs of service based on their use of the Regional Sewer System, as measured by estimates of contributed wastewater volumes and loadings and related data. Allocation of treatment plant costs to Customers reflect the relative pollutant loadings in the various flow types (sanitary, dry weather infiltration, wet weather inflow) contributed by each Customer. Costs associated with major interceptors and pump stations are allocated to Customers based on solely on estimated contributed volume, and partially based on the geography and use of the collection system in certain

The Authority also establishes industrial waste control charges, applicable to all non-residential retail customers in the Service Area, and industrial surcharges, applicable to each commercial, governmental, and industrial user of the Regional Sewer System whose wastewater discharge exceeds the domestic equivalency of certain pollutant parameters.

Rate Simplification Initiative

The current wholesale sewage disposal service charges became effective July 1, 2016 and were designed to generate an overall revenue increase of approximately 4.9 percent over revenues generated by the previous year's charges. The current schedule of charges represents the third year following the Authority's "Rate Simplification Initiative", which was designed to greatly improve the efficiency, understanding, and stability of the process of establishing sewer service charges. Four key strategies define the Rate Simplification Initiative:

- 1. Simplified Calculation of SHAREs Each Customer is assigned a share of various cost pools that make up the annual revenue requirement for the Regional Sewer System. These individual shares are based on a review of historical wastewater contributions to the Sewer System, and when taken in concert result in a consolidated SHARE for each customer. SHAREs were locked in for an initial period of three years, although the protocol allows for appeals for interim adjustments should demographic changes or other circumstances merit.
- 2. Simplified Flow Balancing Previously, significant efforts and costs were expended in pursuit of precise estimates of wastewater volumes and loadings, and the cost allocation principles were focused on updating these data annually. The parties realized that such pursuit was fruitless and wasteful, and that efforts were better directed towards higher value added initiatives. A much more streamlined approach to evaluating wastewater contribution data was developed and implemented.
- 3. Simplified Estimates of Cost Pools Similarly, prior approaches to cost allocation sought precision in determining annual costs of service to specific cost categories, beyond the financial system's ability to track and report such costs. The Rate Simplification Initiative relies on historical data to establish relative assignment of operating and capital revenue requirements to cost pools from which to apply SHAREs.
- 4. Simplified Charge Structure The prior wholesale charge structure consisted of fixed monthly or quarterly charges for each customer, and a unique commodity charge for each customer. Based on individual characteristics, the relative revenues recovered from fixed and commodity charges varied widely, and created confusion. In general, approximately 35% of revenues were collected via fixed charges and the remaining

65% via commodity charges. Under Rate Simplification, all wholesale Customers are billed monthly, and all costs from wholesale Customers are recovered via fixed monthly charges – irrespective of the metered or estimated contributed wastewater for that month. Data on contributed wastewater continues to be collected and monitored for purposes of evaluating future SHAREs for a subsequent rate period after the initial three-year rate period concludes.

The Rate Simplification Initiative delivers many benefits to both the Authority and its Customers. It further aligns allocation and recovery of costs with realistic expectations of precision. The Rate Simplification solution preserves the basic relative historical allocation of revenue requirements to customers, which had not changed materially despite the rigorous annual review of wastewater volumes and loadings. It aligns cost recovery with cost allocation principles, recognizing that over 90% of the annual revenue requirement is fixed irrespective of variable flow volumes and weather conditions. And finally, the Rate Simplification Initiative results in stability for both the Authority and its Customers. Customers know what the bill will be every month, and that annual changes in charges will be much more homogenous than prior experience. The stability and regularity of the Authority's revenue stream is dramatically enhanced, particularly since all customers are now billed monthly. Prior to Rate Simplification approximately 65% of the revenues from the wholesale class were billed and paid quarterly, creating cash management challenges.

The initial rate period SHAREs are in the process of being reviewed and updated for a second rate period, scheduled to commence with the 2018 sewer service charges. New technical information regarding wastewater flows and pollutant contributions is being analyzed and reviewed with Customer representatives as part of the Authority's Customer Outreach Process, and initial recommendations are scheduled to be developed in November 2017. While the modified SHAREs may result in moderate variances between Customers, the overarching goal of maintaining stability should preclude any volatile impacts on individual Customers.

As part of the process of implementing the Rate Simplification Initiative, the parties agreed to modify and consolidate the relevant terms of the existing "Rate Settlement Agreements" that have governed the manner by which sewage disposal charges were determined for suburban wholesale Customers. The basic premises of these agreements were maintained, but updated to align with the general Rate Simplification approach. One of the modifications was abandonment of the traditional "look-back" process, by which annual revenues and revenue requirements from a completed fiscal year were reviewed and analyzed, and subject to "true-up" amounts billed to each Customer, including the City of Detroit retail customer class at large. Analyses were regularly conducted since 1980, and resulted in amounts due to the Regional Sewer System from Customers, or due to Customers from the Regional Sewer System. These specific amounts were generally reflected on bills to Customers in the second subsequent year following the review.

In recent years changes in accounting guidance and related matters caused the Authority and its Customers to re-evaluate the manner by which look-back adjustments

were computed. Working collaboratively with Customer representatives, the Authority finalized a comprehensive review to determine look-back adjustments for 2008, 2009, 2010, 2011, and 2012. These analyses resulted in a "5-Year Look-Back" and an accompanying implementation plan, the result of which added an annual amount of \$20 million to the Detroit retail class and a net total due of approximately \$4.6 million from the wholesale class. These adjustments were fully implemented via charges applied through 2016, and the traditional "look-back" no longer exists. The surviving terms document has been incorporated into wholesale contracts and into the Water and Sewer Services Agreement with the City of Detroit. It contains provisions to accommodate the general intent of the original look-back concept in a simplified manner by adjusting future cost pools to reflect knowledge gained during interim periods.

While the traditional look-back process no longer exists, the surviving contractual terms stipulate that bad debt expense associated with a suburban wholesale Customer is chargeable to the suburban wholesale class at large, and that bad debt expense associated with the City of Detroit retail customer class is chargeable to the City retail customers only. This requirement is implemented by including in service charges to the various customer classes (a) prospective bad debt expense, and (b) "true-up" bad debt expense adjustments (reflecting the difference between actual and projected amounts) for the respective customer class.

The current service charges to suburban wholesale Customers include recovery of two separate amounts related to bad debt expense associated with Highland Park - approximately \$5.6 million related to projected bad debt expense (assuming no recovery from Highland Park) during 2017, and approximately \$3.46 million related to bad debt expense true-up adjustments for 2013 – 2015. The true-up adjustment for the 2017 charges had the effect of adding approximately 1.2% to the overall revenue adjustment for the suburban wholesale customer class, resulting in an overall increase of approximately 4.9% compared to the allocated share increase of the budget increase, which totaled 3.7%.

Modifications Resulting from the Lease

One of the surviving terms from the Rate Settlement Agreements was an adjustment in the cost of service allocations that reflected the "Payment for Indirect Benefits or Services" that was established as part of the 1978 Rate Settlement Agreement. This provision recognized that the City was entitled to a "payment to reflect the cost of indirect benefits or services provided by the City of Detroit to DWSD for common use facilities within the City of Detroit, such as police and fire protection, the risk of tort liability, the loss of tax base that the City loses as a result of the Department's tax exemption, and the fact that the suburbs receive sewage treatment without having to devote any of their land to a tax free utility."

The value of the payment was originally established at \$1 million annually, and the agreement stipulated that it be increased by five percent annually. In effect, the adjusted amount is added to the revenue requirements allocated to the suburban wholesale Customer class and deducted from the Detroit retail customer class. No payment was made to the City General Fund, but the "ownership benefit" was reflected in charges to customers in the City of Detroit retail class.

The Lease contains a directive to "lock in" the ownership benefit at the \$5.516 million figure. The sewer service charges adopted for 2016 reflected the first year that formally reflects this provision. The \$5.516 million adjustment was also applied in development of the 2017 sewer service charges.

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Projection of Revenues

Table 3 presents projected operating revenues for 2017 through 2021. These projections reflect a baseline condition assuming that the existing 2017 sewer service 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 when service is provided, as such approximately reflect wastewater contributions treated and disposed of during the fiscal year. For instance, bills issued in August are reflective of service provided in July and are accounted for as July revenue. The projections shown in Table 3 are developed on the same basis.

Table 3
Summary of Projected Operating Revenue Under Existing Charges (a)

Line		Fiscal Year Ending June 30					
No.		<u>2017</u>	2018	<u>2019</u>	2020	<u>2021</u>	
		\$	\$	\$	\$	\$	
1	Wholesale Customers	260,876,800	260,876,800	260,876,800	260,876,800	260,876,800	
2	Industrial Specific Charges	19,423,200	19,423,200	19,423,200	19,423,200	19,423,200	
	Detroit Retail Customer Class						
3	Revenue from Rates and Charges	255,168,400	246,661,700	240,535,100	234,476,900	231,328,600	
4	Miscellaneous Revenue	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	
5	Total Revenue from Detroit	260,168,400	251,661,700	245,535,100	239,476,900	236,328,600	
6	Total Operating Revenue	540,468,400	531,961,700	525,835,100	519,776,900	516,628,600	
7	Retail revenues are based on projected	d water					
	sales in thousands of cubic feet (Mcf)	2,800,000	2,730,000	2,661,800	2,595,200	2,588,700	

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

Projected revenues from suburban wholesale Customers reflect continued application of the fixed monthly charges associated with the Rate Simplification Initiative. As such, there is no need to rely on projected billable wastewater volumes to develop these projections.

These revenue projections do not include any revenue from the City of Highland Park, a wholesale customer with a delinquent balance of over \$26 million. Highland Park has made periodic small payments, but its delinquency continues to grow. 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.

As noted above, the current service charges to suburban wholesale Customers include recovery amounts related to bad debt associated with Highland Park. These service charges were developed to recover both the current revenue requirements allocated to Highland Park and the bad debt true-up adjustment. The true-up adjustment is scheduled to continue through 2021, but will be modified to reflect actual future results. In effect, the Regional Sewer System and the suburban wholesale Customers are fully "hedged" against lack of payment of bills by Highland Park. The current service charges already include prospective and true-up amounts, and any recovery from Highland Park will serve to reduce the amounts currently being carried by other Customers through future true-up adjustments.

Table 3 also presents the projected sales volumes upon which the commodity charge portion of projected revenues from the City of Detroit retail class are based. Projected sales volumes for 2018 through 2021 reflect the "most probable" scenario assumptions from the water Master Plan findings. Under this scenario, the Detroit service population is projected to decline 0.75% annually, and "usage per capita" is projected to decline 0.27% annually from current level. These assumptions produce annual reductions in sales volume expectations from the Detroit retail customer class of approximately 2.5%.

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.

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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.

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

Line		Fiscal Year Ended June 30,					
	2017	2018	2019	2020	2021		
	\$	\$	\$	\$	\$		
Salaries & Wages	27,476,800	28,343,300	29,722,800	30,944,300	32,212,300		
	5,044,300	5,242,000		5,431,700	5,540,300		
Employee Benefits	10,684,600	10,960,200	11,393,100	11,977,300	12,592,700		
Subtotal Personnel	43,205,700	44,545,500	46,441,100	48,353,300	50,345,300		
Personal (Transitional) Service Contracts	7,117,300	7,593,400	7,055,400	6,459,600	5,821,700		
TOTAL Personnel Costs	50,323,000	52,138,900	53,496,500	54,812,900	56,167,000		
Contractual/Purchased Services	54,961,200	56,838,300	58,409,500	60,161,800	61,966,600		
Utilities	32,921,100	32,974,700	33,963,900	34,982,900	36,032,200		
Chemicals	14,345,700	14,384,500	14,816,100	15,260,500	15,718,300		
Supplies & Other	15,878,800	14,819,200	15,263,700	15,721,600	16,193,300		
Subtotal	168,429,800	171,155,600	175,949,700	180,939,700	186,077,400		
Unallocated Reserve	7,429,000	11,737,800	12,316,500	12,665,800	13,025,400		
Total "Normal" GLWA O&M	175,858,800	182,893,400	188,266,200	193,605,500	199,102,800		
DWSD Local O&M	41,535,500	42,854,500	44,337,500	45,667,600	47,037,600		
Combined Total "Normal" O&M	217,394,300	225,747,900	232,603,700	239,273,100	246,140,400		
Operating Pension Reimbursement (a)							
GLWA Regional	10,838,400	10,838,400	10,838,400	10,838,400	10,838,400		
DWSD Local	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600		
Total	13,700,000	13,700,000	13,700,000	13,700,000	13,700,000		
GRAND TOTAL O&M	231,094,300	239,447,900	246,303,700	252,973,100	259,840,400		
Non-Operating Expense (b)							
Non-Operating Portion of Pension Reimb.	12,200,000	12,200,000	12,200,000	12,200,000	12,200,000		
B & C Note Non-Operating Payments	2,270,400	2,270,400	2,270,400	2,270,400	2,270,300		
Transfer to Pension Obligation Payment Fund	14,470,400	14,470,400	14,470,400	14,470,400	14,470,300		
	Overtime Employee Benefits Subtotal Personnel Personal (Transitional) Service Contracts TOTAL Personnel Costs Contractual/Purchased Services Utilities Chemicals Supplies & Other Subtotal Unallocated Reserve Total "Normal" GLWA O&M DWSD Local O&M Combined Total "Normal" O&M Operating Pension Reimbursement (a) GLWA Regional DWSD Local Total GRAND TOTAL O&M Non-Operating Expense (b) Non-Operating Portion of Pension Reimb. B & C Note Non-Operating Payments	Salaries & Wages 27,476,800 Overtime 5,044,300 Employee Benefits 10,684,600 Subtotal Personnel 43,205,700 Personal (Transitional) Service Contracts 7,117,300 TOTAL Personnel Costs 50,323,000 Contractual/Purchased Services 54,961,200 Utilities 32,921,100 Chemicals 14,345,700 Supplies & Other 15,878,800 Subtotal 168,429,800 Unallocated Reserve 7,429,000 Total "Normal" GLWA O&M 175,858,800 DWSD Local O&M 41,535,500 Combined Total "Normal" O&M 217,394,300 Operating Pension Reimbursement (a) 10,838,400 DWSD Local 2,861,600 Total 13,700,000 GRAND TOTAL O&M 231,094,300 Non-Operating Expense (b) Non-Operating Portion of Pension Reimb. 12,200,000 B & C Note Non-Operating Payments 2,270,400	2017 2018 Salaries & Wages 27,476,800 28,343,300 Overtime 5,044,300 5,242,000 Employee Benefits 10,684,600 10,960,200 Subtotal Personnel 43,205,700 44,545,500 Personal (Transitional) Service Contracts 7,117,300 7,593,400 TOTAL Personnel Costs 50,323,000 52,138,900 Contractual/Purchased Services 54,961,200 56,838,300 Utilities 32,921,100 32,974,700 Chemicals 14,345,700 14,384,500 Supplies & Other 15,878,800 14,819,200 Subtotal 168,429,800 171,155,600 Unallocated Reserve 7,429,000 11,737,800 Total "Normal" GLWA O&M 175,858,800 182,893,400 DWSD Local O&M 217,394,300 225,747,900 Operating Pension Reimbursement (a) 10,838,400 10,838,400 GLWA Regional 10,838,400 10,838,400 2,861,600 Total 13,700,000 2,861,600 2,861,600 GRAND TOTAL	Salaries & Wages 27,476,800 28,343,300 29,722,800 Overtime 5,044,300 5,242,000 5,325,200 Employee Benefits 10,684,600 10,960,200 11,393,100 Subtotal Personnel 43,205,700 44,545,500 46,441,100 Personal (Transitional) Service Contracts 7,117,300 7,593,400 7,055,400 TOTAL Personnel Costs 50,323,000 52,138,900 53,496,500 Contractual/Purchased Services 54,961,200 56,838,300 58,409,500 Utilities 32,921,100 32,974,700 33,963,900 Chemicals 14,345,700 14,384,500 14,816,100 Supplies & Other 15,878,800 14,819,200 15,263,700 Subtotal 168,429,800 171,155,600 175,949,700 Unallocated Reserve 7,429,000 11,737,800 12,316,500 Total "Normal" GLWA O&M 175,858,800 182,893,400 188,266,200 DWSD Local O&M 41,535,500 42,854,500 44,337,500 Combined Total "Normal" O&M 217,394,300 225,747	Salaries & Wages 27,476,800 28,343,300 29,722,800 30,944,300 Overtime 5,044,300 5,242,000 5,325,200 5,431,700 Employee Benefits 10,684,600 10,960,200 11,393,100 11,977,300 Subtotal Personnel 43,205,700 44,545,500 46,441,100 48,353,300 Personal (Transitional) Service Contracts 7,117,300 7,593,400 7,055,400 6,459,600 TOTAL Personnel Costs 50,323,000 52,138,900 53,496,500 54,812,900 Contractual/Purchased Services 54,961,200 56,838,300 58,409,500 60,161,800 Utilities 32,921,100 32,974,700 33,963,900 34,982,900 Chemicals 14,345,700 14,816,100 15,260,500 Supplies & Other 15,878,800 14,819,200 15,263,700 15,721,600 Subtotal 168,429,800 171,155,600 175,949,700 180,939,700 Unallocated Reserve 7,429,000 11,737,800 12,316,500 193,605,500 DWSD Local 28,000 21,		

⁽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.

The annual "normal" operating expenses of the Regional Sewer 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

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

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 2.8% annually after 2018.

The projected operating budget for DWSD Local Sewer 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 Sewer System.

As noted above, the operation and maintenance expenses also include deposits to the Pension Obligation subaccounts of the Operation and Maintenance Fund, which total \$13.7 million annually for the Sewer System, and which are shown on Lines 16 and 17 of Table 4. The remaining Sewer System \$12.2 million annual contribution to the Pension Obligation Payment Fund is shown as a non-operating expense on Line 20, and the Sewer 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 Sewer System's allocated share of the annual \$45.4 million combined annual contribution to the GRS pension plan totals \$26 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 Sewer System CIP (Line 1) for the study period. Traditionally, the Sewer System's capital financing strategies followed a "maximum debt financing" strategy. In essence, within the constraints of the Additional Bonds Test and the Sewer 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 Sewer 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 Sewer System.

Table 5
Capital Improvement Program Financing

Line		Fiscal Year Ending June 30,						
No.	<u>Item</u>	2017	2018	2019	2020	2021	Total	
		\$	\$	\$	\$	\$	\$	
	Financing Requirements							
1	Capital Improvement Program (a)	128,973,000	147,894,000	145,070,000	109,708,000	125,000,000	781,645,000	
	Financing Sources							
	Improvement and Extension Fund							
2	Beginning Balance (b)	92,000,000	90,380,400	72,306,800	76,221,600	83,304,900	92,000,000	(h)
3	Revenue Financed Capital	28,380,400	36,926,400	43,914,800	52,083,300	70,446,500	231,751,400	
4	Subtotal - Improvement & Extension Fund	120,380,400	127,306,800	116,221,600	128,304,900	153,751,400	323,751,400	
	Construction Bond Funds							
5	Beginning Balance (b)	100,000,000	41,675,000	125,081,000	41,176,000	117,468,000	100,000,000	(i)
	Bond Proceeds	, ,	, ,	, ,	, ,	, ,		,
6	Sewer System Revenue Bonds (c)	421,295,000	150,000,000	0	150,000,000	0	721,295,000	
7	Original Issue Premium	61,172,700					61,172,700	
8	Available Debt Service Payment Funds	10,416,900					10,416,900	
9	Available in Debt Service Reserve Funds	23,824,400					23,824,400	
10	Less: Defeasance Requirements (d)	(514,338,400)					(514,338,400)	
11	Less: Transfer to DWSD Const. Fund	0	0	0	0	0	0	
12	Less: Bond Reserve Requirements (e)	0	(8,100,000)	0	(8,100,000)	0	(16,200,000)	
13	Less: Issuance Expenses	(2,370,600)	(900,000)	<u>0</u>	(900,000)	<u>0</u>	(4,170,600)	
14	Net Bond Proceeds Available	0	141,000,000	0	141,000,000	0	282,000,000	
15	State Revolving Fund Loans (f)	40,648,000	35,300,000	21,165,000	<u>0</u>	0	97,113,000	
16	Subtotal - Construction Bond Funds	140,648,000	217,975,000	146,246,000	182,176,000	117,468,000	479,113,000	
17	Total Financing Sources Available	261,028,400	345,281,800	262,467,600	310,480,900	271,219,400	802,864,400	
	Application of Financing Sources							
18	Project Expeditures from I&E Funds	30,000,000	55,000,000	40,000,000	45,000,000	50,000,000	220,000,000	
19	Project Expeditures from Construction Funds	98,973,000	92,894,000	105,070,000	64,708,000	75,000,000	436,645,000	
20	Total Financing Sources Applied	128,973,000	147,894,000	145,070,000	109,708,000	125,000,000	656,645,000	
	Financing Sources Available for Future Re-	auirements						
21	Improvement & Extension Fund (g)	90,380,400	72,306,800	76,221,600	83,304,900	103,751,400	103,751,400	(j)
22	Construction Bond Funds (h)	41,675,000	125,081,000	41,176,000	117,468,000	42,468,000	42,468,000	(j)
23	Total Financing Sources Available for Future	132,055,400	197,387,800	117,397,600	200,772,900	146,219,400	146,219,400	(j)

⁽a) From Table 2.

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

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

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

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

⁽e) For future bonds, assumes amounts will be required from bond proceeds to fund debt service reserve fund.

⁽f) Reflects draw down on funds as project expenditures are incurred.

⁽g) Line 4 minus Line 18.

⁽h) Line 12 minus Line 19.

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

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

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 16. Line 5 shows the estimated net balance in the Construction Fund as of June 30, 2016, which is available to fund the CIP. As previously noted, the proceeds of the Series 2016 Bonds will be utilized to refinance certain outstanding bonds of the Authority, as shown on Lines 6 through 14. None of the proceeds from this transaction are designed to produce capital finance for the Authority. Line 15 presents the proceeds from State Clean Water Revolving Fund (CWRF) Loans. In September 2016 the Authority issued Junior Lien Sewage Disposal System Revenue Bonds through the CWRF to finance approximately \$70.6 million of improvements scheduled in the Authority CIP. As the Authority incurs expenditures for CWRF funded projects, invoices are transmitted to the state administrators of the CWRF for remittance. As such, the amounts shown on Line 11 reflect the projected expenditure schedule of CWRF funded projects.

Existing available fund balances, draws from loans from the CWRF, and transfers from revenues to the Authority I&E Fund are projected to be sufficient to finance Regional Sewer System CIP expenditures through at least September 2017. The capital financing plan presented in Table 5 envisions issuance of additional revenue bonds in 2018 and 2020 to finance additional expenditures in the Regional Sewer System CIP. For planning purposes, these projected additional bonds do not include any proceeds to finance expenditures for the DWSD Local Sewer 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 any bonds issued to finance capital improvements to the DWSD Local Sewer System, the annual principal and interest requirements are included in the revenue requirements assigned to the City of Detroit retail customer class.

Lines 18 through 20 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 21 through 23 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 \$70 to \$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 Sewer 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 City of Detroit retail 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 revenue adjustments during the projection period are believed to be comparable with those that should be experienced in other areas of the country having sewer systems of comparable age, and facing similar infrastructure challenges, as the Sewer System.

Projected non-operating revenues of the Regional Sewer System include investment earnings from all eligible Sewer 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 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	re Fiscal Year Ending June 30,					
No.	Item	2017	2018	2019	2020	2021
		\$	\$	\$	\$	\$
	Revenue (a)					
1	Operating Revenue Under Existing Charges	535,468,400	526,961,700	520,835,100	514,776,900	511,628,600
	Projected Revenue from Adjustments					
2	FY 2018: 5.7%		30,102,300	29,752,300	29,406,300	29,226,400
3	FY 2019: 5.3%			29,100,800	28,762,300	28,586,400
4	FY 2020: 5.3%				30,162,100	29,977,600
5	FY 2021: 4.7%					27,972,000
6	Total Projected Revenue from Sewer Charges	535,468,400	557,064,000	579,688,200	603,107,600	627,391,000
7	Miscellaneous Operating Revenue	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
8	Total Operating Revenue	540,468,400	562,064,000	584,688,200	608,107,600	632,391,000
9	Non-Operating Revenue	4,115,200	2,751,000	2,719,400	2,796,300	2,949,100
10	Total Revenue Available	544,583,600	564,815,000	587,407,600	610,903,900	635,340,100
	Revenue Requirements					
11	Transfer to GLWA Regional O&M Account	175,858,800	182,893,400	188,266,200	193,605,500	199,102,800
12 13	Transfer to DWSD Local O&M Account Transfer to GLWA Pension O&M Account	41,535,500 10,838,400	42,854,500 10,838,400	44,337,500 10,838,400	45,667,600 10,838,400	47,037,600 10,838,400
14	Transfer to DWSD Pension O&M Account	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600
15	Total O&M Expense	231,094,300	239,447,900	246,303,700	252,973,100	259,840,400
	Debt Service					
16	Senior Lien Bonds Outstanding Bonds	128,792,100	126,800,100	131,680,800	131,694,500	122,093,500
17	The 2016 GLWA Bonds	4,273,600	6,305,300	6,305,300	6,305,300	6,305,300
18	Future Bonds (lien unspecified)	0	3,562,500	9,481,400	14,825,200	18,962,400
19	Total Senior Debt Service	133,065,700	136,667,900	147,467,500	152,825,000	147,361,200
	Second Lien Bonds					
20	Outstanding Bonds	37,474,300	29,470,600	29,403,100	31,359,300	40,122,600
21	The 2016 GLWA Bonds	10,444,400	14,519,600	14,519,600	14,519,600	14,519,600
22	Total Second Lien Bonds	47,918,700	43,990,200	43,922,700	45,878,900	54,642,200
23	Subtotal Debt Service	180,984,400	180,658,100	191,390,200	198,703,900	202,003,400
24	State Revolving Loan Repayments	0.270.700	0.271.400	0.027.100	0.500.200	4 110 200
24 25	Senior Lien Bonds Junior Lien Bonds	9,270,700 47,574,800	9,271,400 48,266,000	9,027,100 49,676,900	8,599,200 51,374,100	4,110,300 51,567,700
26	Subtotal SRF Loan Repayments	56,845,500	57,537,400	58,704,000	59,973,300	55,678,000
27	Total Debt Service	237,829,900	238,195,500	250,094,200	258,677,200	257,681,400
28	Non-Operating Portion of Pension Reimb.	12,200,000	12,200,000	12,200,000	12,200,000	12,200,000
29	B & C Note Non-Operating Payments	2,270,400	2,270,400	2,270,400	2,270,400	2,270,300
30	Transfer to Pension Obligation Payment Fund	14,470,400	14,470,400	14,470,400	14,470,400	14,470,300
31	Transfer to WRAP Fund	2,654,600	2,634,800	2,752,900	2,864,700	2,997,100
32	Transfer to Budget Stabilization Fund	2,654,000	2,654,000	0	0	0
33	Transfer to Extra. Repair and Repl. Fund	0	1,253,000	1,028,400	1,000,400	1,030,100
34	Lease Payment - Transfer to Detroit Local I&E	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000
35	Transfers to I&E Fund to Finance Capital Improver Transfer to GLWA Regional I&E Account	28,380,400	36,926,400	43,914,800	52,083,300	70,446,500
36	Transfer to DWSD Local I&E Account	<u>0</u>	0	<u>0</u>	<u>0</u>	0
37	Total Transfers to I&E Fund	28,380,400	36,926,400	43,914,800	52,083,300	70,446,500
38	Transfer to Surplus Fund - Operating Reserve	0	1,733,000	1,343,200	1,334,800	1,374,300
39	Total Revenue Requirements	544,583,600	564,815,000	587,407,600	610,903,900	635,340,100
40	Indicated Balance (Deficiency)	0	0	0	0	0
	Debt Service Coverage Projections					
41	Senior Lien for Rate Covenant Purposes	220%	223%	218%	222%	248%
42	Second Lien for Rate Covenant Purposes	165%	171%	170%	173%	182%
43	SRF Junior Lien for Rate Covenant Purposes	132%	137%	136%	138%	146%
44	Net Revenues (10) - (15)	313,489,300	325,367,100	341,103,900	357,930,800	375,499,700
45	Net Revenues Available after Debt Service (44)-(27)	75,659,400	87,171,600	91,009,700	99,253,600	117,818,300
46 47	Applied to MBO Reserve Funds (30,31,32,33) Applied as Lease Payment to DWSD I&E Acct (34)	(19,779,000) (27,500,000)	(21,012,200) (27,500,000)	(18,251,700) (27,500,000)	(18,335,500) (27,500,000)	(18,497,500) (27,500,000)
48	Applied to Operating Reserves (38)	(27,300,000)	(1,733,000)	(1,343,200)	(1,334,800)	(1,374,300)
49	Available for I&E Fund Accounts (45) - (46,47,48)	28,380,400	36,926,400	43,914,800	52,083,300	70,446,500

⁽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 27, separated by priorities of lien. The debt service on outstanding bonds reflects the savings provided by 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 estimated debt service 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 CWRF Loans are stated on Lines 24 through 26. These figures reflect repayments of existing loans, including the recently closed transaction. CWRF Loans issued prior to 2000 are treated as Senior Lien Bonds. All subsequent CWRF Loans are treated as Junior Lien Bonds.

Transfers to the WRAP Fund, shown on Line 31, 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 32 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 33 are those required to maintain this status as budgeted operating expenses increase.

The next revenue requirement relates to the Regional Sewer 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 \$27.5 million transfer of Authority revenues to the Detroit Local Water I&E Account of the Sewer 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 34.

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 biennial budget for 2017 and 2018 did not include any funding for the Detroit Local I&E Account, as indicated on Line 37. For purposes of these projections we have assumed no funding of the Detroit Local I&E Account (other than that provided by the Lease Payment) for the remainder of the projection period.

Line 38 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 34), 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 \$565 million. An increase of 4% results in total 2019 revenue requirements of approximately \$587 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 \$543 million, approximately \$44 million remains, which is reflected as the transfer to the GLWA Regional I&E Account on Line 35.

Pursuant to the Rate Covenant of the Master Bond Ordinance, sewer 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 41 through 43. 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 Sewer 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		Fiscal Year Ending June 30,						
No.	<u>Item</u>	<u>2017</u>	2018	<u>2019</u>	2020	2021		
		\$	\$	\$	\$	\$		
	Operating Fund							
1	Beginning Balance	46,700,000	46,700,000	48,433,000	49,776,200	51,111,000		
2	Deposit from Operations	0	1,733,000	1,343,200	1,334,800	1,374,300		
3	Ending Balance	46,700,000	48,433,000	49,776,200	51,111,000	52,485,300		
	Budget Stabilization Fund							
4	Beginning Balance	5,591,800	8,245,800	10,899,800	10,899,800	10,899,800		
5	Deposits / (Withdrawals)	2,654,000	2,654,000	0 10,899,800	10,899,800	10,899,800		
6	Ending Balance	8,245,800	10,899,800	10,899,800	10,899,800	10,899,800		
	ER&R Fund							
7	Beginning Balance	32,609,200	32,609,200	33,862,200	34,890,600	35,891,000		
8	Transfers from Revenues	0	1,253,000	1,028,400	1,000,400	1,030,100		
9	Ending Balance	32,609,200	33,862,200	34,890,600	35,891,000	36,921,100		
	<u>I&E Fund (a)</u>							
10	Beginning Balance	92,000,000	90,380,400	72,306,800	76,221,600	83,304,900		
11	Deposits from Revenues (b)	28,380,400	36,926,400	43,914,800	52,083,300	70,446,500		
12	Capital Expenditures	(30,000,000)	(55,000,000)	(40,000,000)	(45,000,000)	(50,000,000)		
13	Ending Balance	90,380,400	72,306,800	76,221,600	83,304,900	103,751,400		
	Total Revenue Generated Funds (c)							
14	Beginning Balance	176,901,000	177,935,400	165,501,800	171,788,200	181,206,700		
15	Net Transfers	1,034,400	(12,433,600)	6,286,400	9,418,500	22,850,900		
16	Ending Balance	177,935,400	165,501,800	171,788,200	181,206,700	204,057,600		
	Other Funds							
17	Bond Reserve (excludes Surety)	89,587,100	97,687,100	97,687,100	105,787,100	105,787,100		
18	Bond Redemption (Average)	79,276,600	79,398,500	83,364,700	86,225,700	85,893,800		
19	Construction Fund	41,675,000	125,081,000	41,176,000	117,468,000	42,468,000		
20	Total Funds	388,474,100	467,668,400	394,016,000	490,687,500	438,206,500		
21	Subtotal w/o Construction Funds	346,799,100	342,587,400	352,840,000	373,219,500	395,738,500		

⁽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 Sewer System funds for any Sewer 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. Although the Series 2016 Bonds are entirely being issued as refunding bonds, they do contain provisions to refund Senior Lien Bonds with Second Lien Bonds, and the Authority has opted to certify compliance with the ABT via the "coverage test".

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 Sewer 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 Sewer 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 Sewer System to Meet the Additional Bonds Test for Issuance of the Bonds

				(1)	(2)	(3)	
Line				Historical Test	Prospec	tive Test	
No.				DWSD	Current Year	Succeeding Year	
				FY 2015	FY 2017	FY 2018	
				\$	\$	\$	
1	Revenues			506,902,900	544,583,600	564,815,000	
2	Operating Expenses			(195,078,700)	(231,094,300)	(239,447,900)	
3	Net Revenues			311,824,200	313,489,300	325,367,100	
4	Augmentation (a)			40,731,500	NA	NA	
5	Augmented Revenues			547,634,400	544,583,600	564,815,000	
6	Augmented Net Revenues			352,555,700	313,489,300	325,367,100	
	Alllowable Max Future Debt Serv	vice_					
7	Senior Lien Bonds	1.20		293,796,400	261,241,100	271,139,300	
8	Senior and 2nd Lien Bonds	1.10		320,505,200	284,990,300	295,788,300	
9	All Bonds, Including SRF Jr Lien	1.00		352,555,700	313,489,300	325,367,100	
	Maximum Future Debt Service						
10	Senior Lien Bonds	in 2033		156,920,900	156,920,900	156,920,900	
11	2nd Lien Bonds	in 2030		218,163,100	218,163,100	218,163,100	
12	SRF Jr Lien Bonds	in 2022		243,921,100	243,921,100	243,921,100	
	Additional Bonds Test Coverage I	Ratio					
13	Senior Lien Bonds			2.25	2.00	2.07	
14	2nd Lien Bonds			1.62	1.44	1.49	
15	SRF Jr Lien Bonds			1.45	1.29	1.33	
(a) Augn	nented Revenue Calculation	(1)	(2)	(3)	(4)	(5)	(6)
		Reported	Augmenta	tion - % Charge A	djustment	Calculated	Augmented
		<u>Revenue</u>	FY 16 Charges	FY 17 Charges	<u>Combined</u>	<u>Augmentation</u>	<u>Revenue</u>
					(2) & (3)	(1)*(4)	(1) + (5)
	FY 2015	audited					
16	Wholesale Service Revenue	239,652,300	N/A	N/A	N/A	21,224,500	260,876,800
17	Retail Service Revenue	232,382,300	8.5%	3.5%	12.4%		261,119,000
18	Industrial Specific Svc. Revenue	28,652,900	N/A	N/A	N/A	(9,229,700)	19,423,200
19	Total Revenue from Charges	500,687,500			8.1%	40,731,500	541,419,000

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 potential findings from the pending update to the Authority's Sewer System master plan, the projected increases in the Authority's wholesale sewer 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 Sewer 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 Sewer 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 SEWER 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 SEWAGE DISPOSAL SYSTEM SERVICE AREA

GLWA currently operates a regional Sewage Disposal System which serves 2.8 million people. The Authority's customers include the entire City of Detroit, served by the Authority pursuant to a Water and Sewer Services Agreement with the Detroit Water and Sewerage Department ("DWSD"), the entity that provides retail local sewer services within the City, and 76 other southeastern Michigan communities. All of GLWA's Sewage Disposal System service area is within the Detroit-Warren-Livonia Metropolitan Statistical Area ("Detroit MSA").

Although the City is the single largest entity served by GLWA's Sewage Disposal System, the City's relative importance has declined as nearby communities have increased in population and joined the Sewage Disposal System. As a percentage of total population served by the system, the City has declined from 73% in 1950 to 20% in 2010, according to decennial U.S. Census data. More recent estimates report further declines in the City's total population and relative size as a percentage of the GLWA's service area population.

LARGEST MUNICIPAL ENTITIES SERVED BY THE AUTHORITY

Set forth below are summary descriptions of the largest municipal entities receiving sewage disposal 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.

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.

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.

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.

Trov

The City of Troy is served through both the Southeast Oakland County Sewage Disposal District and the Evergreen-Farmington District. It covers 33.6 square miles and is located 14 miles north of Detroit. Troy is principally a residential community with the primary non-residential taxpayers being light industry, research and office centers. The Troy office market is second only to Southfield in suburban office space available. The 2015 population was 83,280 making it the 11th largest city in the State and the largest city in Oakland County.

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.

Southfield

The City of Southfield is served by both the Southeast Oakland Sewage Disposal District and the Evergreen-Framington District. It is located adjacent to and northwest of the City of Detroit and covers approximately 26.2 square miles and had an estimated 2015 population of 73,156. Southfield is a residential community with substantial commercial development.

St. Clair Shores

The City of St. Clair Shores, served through the Southeast Macomb District, is a residential community of 11.6 square miles extending along Lake St. Clair. St. Clair Shores is located in southeastern Macomb County, 13 miles northeast of downtown Detroit and adjacent to and north of Grosse Pointe Shores. St. Clair Shores has undergone substantial growth since its incorporation in 1950 when its population totaled 19,823. The 2015 population was 59,903. St. Clair Shores is predominantly a residential community with limited manufacturing and commercial development.

Royal Oak

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 located in the southeastern part of Oakland County, two miles north of the Detroit city limits.

Dearborn Heights

The City of Dearborn Heights, served through the Middle Rouge Valley District, is located in central Wayne County. It is contiguous with the City of Dearborn on three sides and its northeast boundary adjoins Detroit. Incorporated as a city in 1963, Dearborn Heights encompasses an area of approximately 11.7 square miles which is essentially fully developed. There are no major industrial taxpayers in Dearborn Heights. A substantial portion of its population is employed by Ford Motor Company. The 2015 population was 56,145.

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

	Detroit-Warren	U.S.	
Year	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

	201	12	201	.3	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>	10.5%	<u>188</u>	10.1%	<u>184</u>	9.7%	<u>184</u>	<u>9.4</u> %
Total	<u>1,833</u>	100.0%	<u>1,864</u>	100.0%	1,897	100.0%	<u>1,962</u>	100.0%

U.S.

	2012		201	3	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	22,239	16.4%	22,208	16.1%	22,305	<u>15.8%</u>	21,931	<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		United
	MSA	State of Michigan	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 (In Thousands)	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
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>	42.4
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

		Median
		household
Rank	Metropolitan Area	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 sewage disposal revenue bonds or sewage disposal revenue refunding bonds of GLWA of equal standing with or subordinate to the DWSD Sewer 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 Sewer Facilities or which generally relate to the Leased Sewer Facilities.

"Authority Regional Construction Account" means the account of the Construction Fund for the Regional Sewer 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 Sewer 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 Sewer System for each Fiscal Year, including without limitation all of the following: (a) Operation and Maintenance Expenses of the Regional Sewer 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 Sewer 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 Sewer 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. 2015-02 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 Sewer 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 Sewer 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 \$5,591,469 for the Local Sewer 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 Sewer 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 Sewer System and Retail Sewer Customers the cost of sewage disposal service provided by the Regional Sewer System that benefits both wholesale customers and Retail Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer 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 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 Water Lease.

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

"DWSD Sewer 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 Sewer 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 Sewer System and the Local Sewer 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 Sewer System or the Local Sewer 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 Sewer System and the

Local Sewer 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 Sewer 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 Sewer System and the Local Sewer 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 Sewer 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 Sewer 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 Sewer 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 sewer systems comparable in size and function to the Sewer 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 Sewage Disposal System Lease dated June 12, 2015, between the City, as lessor, and GLWA, as lessee, of the Leased Sewer 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 Sewer 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 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, including without limitation the land, buildings, basins, pump stations, outfalls, storage facilities, other structures, fixtures (including screens, meters, control gates, interceptors and collection lines), and improvements, and real property interests such as easements, access rights, rights of way, permits, licenses and leases, all as more fully set forth in Schedule A attached hereto (the "Real Property"), and any and all tangible personal property such as machinery, equipment, vehicles, furniture, office equipment, software, hardware, security systems, communications systems, other information technology systems and inventory used in connection with the Real Property, including without limitation the personal property that is described in Schedule A attached hereto (the "Personal Property"). Leased Sewer 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 Sewer Facilities.

"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 Regional Water System and owned by the City and providing water service to the wholesale customers of the Regional Water System and Retail Water Customers up to the point of connection to the Detroit Local Water Facilities, all as more fully set forth in the Water Lease.

"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 Sewer Facilities or the Detroit Local Sewer Facilities, the gross proceeds derived by GLWA or the City, as the case may be, from insurance on or condemnation of the Leased Sewer 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 Sewer System or the Local Sewer 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.18-01" means Ordinance No. 18-01 of the City, adopted by the City Council of the City on October 18, 2001, and which amended and restated Ordinance No. 27-86 of the City related to the Sewer 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 Sewer 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 Sewer 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 Sewer 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 sewer 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 Sewer 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 Sewer 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 average 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 Water System Master Bond Ordinance and held in trust by the Trustee.

"Revenues" means the revenues, including the Retail Revenues, of GLWA from the Sewer 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 Sewer Bonds having a second lien on the Net Revenues of the Sewer System that are being assumed by GLWA and any Additional Bonds of equal Priority of Lien.

"Senior Lien Bonds" means the DWSD Sewer Bonds having a first and senior lien on the Net Revenues of the Sewer 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 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 Water Pollution Control 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 Sewer 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 sewage disposal industry and of favorable reputation for skill and experience in performing the duties of providing consulting services to municipal sewage disposal systems comparable in size and function to the Sewer 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 Lease" means the Regional Water Supply System Lease, to be effective on the Effective Date, relating to the lease of the Leased Water Facilities from the City to GLWA.

"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 Sewer Facilities and (ii) the Water Lease pursuant to which the City agreed to lease to GLWA the Leased Water Facilities. Complete copies of the Lease and the Water Lease are available on GLWA's website at www.glwater.org.

Pursuant to the Lease, the City leased the Leased Sewer Facilities and assigned and transferred its interest in all revenues derived from the sale of sewage disposal services to the wholesale customers and the Retail Sewer Customers of the Sewer 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 Sewer Facilities in order to enable GLWA to operate the Leased Sewer Facilities as provided in the Lease. The City continues to own, operate and be responsible for the operation and maintenance of the Detroit Local Sewer Facilities, which consist of all sewage disposal facilities that provide sewage disposal services directly to the Retail Sewer 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 Sewer Bonds, including all of the obligations to make payments of principal of and interest on the DWSD Sewer Bonds. In acquiring the Leased Sewer 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 Sewer 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 Sewer System, existing DWSD vendor contracts related to the Regional Sewer System, the City's rights under the contracts with bond insurers and surety bond providers with respect to the DWSD Sewer Bonds and all other liabilities and obligations of the City with respect to the

Leased Sewer Facilities. GLWA also agreed to provide continuing disclosure with respect to information within its control relating to GLWA, the Leased Sewer Facilities and the DWSD Sewer 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 Sewer Bonds.

Retirement Obligations

As further consideration for the acquisition of the Regional Sewer System pursuant to the Lease, the Authority is required to pay that portion of the Pension Obligation allocable to the Regional Sewer 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 Sewer System (the "City Pension Obligation") and that portion of the BC Note Obligation allocable to the Local Sewer 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 sewer service for customers of the Sewer System, including Retail Sewer Customers, (ii) GLWA may delegate its rights to establish rates for sewer service to customers of the Sewer 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 sewer 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 \$27,500,000 per year (the "Lease Payment"), to be funded from a portion of the common-to-all revenue requirements for the Regional Sewer 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 Sewer 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 Sewer System improvements or Local Sewer System improvements will be issued by GLWA and will be secured by the Net Revenues.

Operation of Leased Sewer Facilities

GLWA agrees to operate the Leased Sewer Facilities for the purpose of furnishing sewer service to its customers in accordance with Applicable Laws and Prudent Utility Practices, all in a manner so as to provide sewer 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 Sewer 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 Sewer Facilities and to keep the Leased Sewer 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 Sewer 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 Sewer Facilities and the Regional Sewer System in commercially reasonable amounts, provided that GLWA is 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 Sewer Facilities

If during the Term, any portion of the Leased Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer Facilities as necessary to achieve the Performance Standards.

If the Leased Sewer 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 Sewer 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 Sewer Facilities that would constitute a Taking of all or any part of the Leased Sewer Facilities if the effect of such Taking is to render it impracticable for the Leased Sewer Facilities to furnish sewer service to GLWA's customers in accordance with the Performance Standards.

Improvements to Leased Sewer Facilities

During the Term, GLWA is entitled to make such rehabilitation of and replacements and improvements to the Leased Sewer Facilities as it determines to be necessary in order to keep the Leased Sewer 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 Sewer 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 sewer master plan. In reviewing the plan, GLWA will use its best efforts to maximize utilization of the capacity in the Regional Sewer 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 Sewer System, shall strive to become the provider of choice for southeastern Michigan and shall consider incentives for customers to utilize the Regional Sewer System for their sewage disposal needs.

Adoption of Budget; Rates for Use of Leased Sewer Facilities

GLWA adopted a budget for the Regional Sewer System for the period from the Effective Date through June 30, 2016, which was based on a bi-furcation between the Regional Sewer System and the Local Sewer System of the budget adopted by DWSD relating to the Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer Customers in the City for such Fiscal Year, the City shall receive a credit in the amount of \$5,516,000, representing the return on equity to the City for the Sewer System in recognition of the City's ownership of the Sewer System and support of the rate structure for the Sewer System.

As provided in the Lease, through the Fiscal Year ending June 30, 2025, the 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 Sewer 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 Sewer 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 Sewer System as provided in the Water and Sewer Services Agreement.

Sale or Disposition of Leased Sewer Facilities or Detroit Local Sewer 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 Sewer 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 Sewer Facilities or that such sale or disposition will not impair the operating efficiency of the Leased Sewer 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 Sewer 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 Sewer Facilities or any of the Detroit Local Sewer 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

<u>Events of Default</u>. 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 Default 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 Sewer System and the Local Sewer 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 Sewer System and Local Sewer 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 Sewer 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 Sewer 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 Water System and the Sewer 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:

<u>First</u>: 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 Sewer System and the Local Sewer 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 Sewer System and the Local Sewer 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;

<u>Third</u>: 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;

<u>Fourth</u>: 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;

<u>Fifth</u>: 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:

<u>Sixth</u>: 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;

<u>Eighth</u>: 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 Sewer System and Local Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer System on deposit in the Pension Obligation Payment Fund, on the same ratable basis as the allocation of payroll costs between the Sewer 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 Sewer 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 Sewer 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 Sewer System's allocable share of \$24 million (the "Required Annual GRS Payment") and (ii) the Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer System and the Local Sewer 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 Sewer 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 Sewer 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 Sewer 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 Sewer System and the Local Sewer 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 Sewer System or the Local Sewer 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 Sates 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 Sewer 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 Sewer 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 Sewer 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 sewage disposal industry and of favorable reputation for skill and experience in performing the duties of providing consulting services to municipal sewer systems comparable in size and function to the Sewer 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 Sewer 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 Sewer System or the Local Sewer System (including repaying amounts withdrawn from the Extraordinary Repair and Replacement Reserve Fund for the Regional Sewer System or the Local Sewer 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 Sewer 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 Sewer 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 Sewer 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:

<u>First</u>: 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

<u>Fourth</u>: 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.

<u>Fifth</u>: 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.

<u>Lease Payments</u>. 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.

<u>Rate Methodology</u>. 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.

<u>Lease Payments</u>. 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.

<u>Authority Usage</u>. 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.

<u>Detroit Local System Usage</u>. 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.

<u>Preliminary Budget Forecast</u>. 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 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 Issuers" 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 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.

<u>Payment Terms</u>. 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").

<u>Invoice Disputes</u>. 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 \$421,295,000

Sewage Disposal System 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 \$126,105,000 Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2016B (the "Series 2016B Bonds") and (ii) its \$295,190,000 Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2016C (the "Series 2016C Bonds" and together with the Series 2016B 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. 2015-02 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 Sewage Disposal System Revenue Refunding Bonds in a Principal Amount not to Exceed \$600,000,000, 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 October14, 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; <u>provided</u>, <u>however</u>, 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 SEWER 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
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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:	\$421,295,000 Great Lakes Water Authority Sewage Disposal System Revenue Refunding Bonds, Series 2016			
Date of Bonds:	October 27, 2016			
the above-named Bonds as a	EBY GIVEN that the Issuer has not provided an Annual Report with respect to required by Section 3 of its Continuing Disclosure Undertaking with respect to cipates 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:	\$421,295,000 Great Lakes Water Authority Sewage Disposal System Revenue Refunding Bonds, Series 2016		
Date of Bonds:	October 27, 2016		
	EBY GIVEN that the Issuer's fiscal year has changed. Previously, the Issuer's It now ends on		
	GREAT LAKES WATER AUTHORITY		
	By: Its		
Dated:			

EXHIBIT C

ANNUAL REPORT COVER SHEET

This cover sheet and the attached Annual Report or portion thereof 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)(A) and (B).

Issuer: Great Lakes Water Authority
Issuer's Six-Digit CUSIP Number(s):
or Nine-Digit CUSIP Number(s) to which the attached Annual Report relates:
Number of pages of the attached Annual Report or portion thereof:
Name of Bond Issue to which the attached Annual Report relates: \$
Date of such Bonds:
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:

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 Wate	er 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	I Event Notice:
Description of the attached Ever	
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.	
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.	
11.	Rating changes
12.	
13.	
14.	
	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 haraby rapresent that I am outh	norized by the Issuer or its agent to distribute this information publicly:
Thereby represent that I am audi	iorized by the issuer of its agent to distribute this information publicly.
Signature:	m.a
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 \$126,105,000 Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2016B (the "Series 2016B Bonds") and (ii) its \$295,190,000 Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2016C (the "Series 2016C Bonds" and together with the Series 2016B 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. 2015-02 adopted by the Board of Directors of the Issuer on October 7, 2015, as amended (the "Bond Ordinance"), (iv) Ordinance No. 2016-09 adopted by the Board of Directors of the Issuer on August 10, 2016 (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 Sewer 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 not 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 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 by or on behalf of the Issuer

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.
	Ву —	Authorized Officer

A subsidiary of Assured Guaranty Municipal Holdings Inc. 1633 Broadway, New York, N.Y. 10019 (212) 974-0100

Form 500NY (5/90)