#### **ADDENDUM TO**

## OFFICIAL STATEMENT DATED FEBRUARY 4, 2021

relating to

## \$194,300,000 CITY OF NEW ORLEANS, LOUISIANA TAXABLE WATER REVENUE REFUNDING BONDS, SERIES 2021

PLEASE BE ADVISED that the section of the above-referenced Official Statement has been updated, as follows:

# Page 21 – "SEWERAGE AND WATER BOARD OF NEW ORLEANS – Organizational Structure"

*The following has been added to the brief biography of Robert Turner, General Superintendent:* 

Subsequent to the date of the Official Statement, Mr. Robert Turner announced his intention to retire, effective March 5, 2021. The Board has appointed an interim General Superintendent from among its current staff. The interim General Superintendent will remain in place until the Board appoints a permanent successor. The Board will undertake a thorough process to identify a replacement.

**BOARD OF LIQUIDATION, CITY DEBT** 

/s/ Davíd W. Gernhauser
David W. Gernhauser, Secretary

The date of this Addendum is February 25, 2021.



RATINGS: Insured – S&P: "AA" Underlying - S&P: "A-"; Fitch: "BBB+" See "BOND RATINGS" herein

In the opinion of Foley & Judell, L.L.P., and Auzenne & Associates, L.L.C., Co-Bond Counsel, under existing law, interest on the Series 2021 Bonds is not excludable from gross income for federal income tax purposes. Further, pursuant to the Act (as defined herein), the Series 2021 Bonds are exempt from all taxation for state, parish, municipal, or other purposes. See "TAX MATTERS" herein and Appendix "G" attached hereto.



# \$194,300,000 CITY OF NEW ORLEANS, LOUISIANA TAXABLE WATER REVENUE REFUNDING BONDS, SERIES 2021



#### **Dated: Date of Delivery**

Due: December 1, as shown on the inside cover

The City of New Orleans, Louisiana (the "Issuer" or the "City"), is issuing the Taxable Water Revenue Refunding Bonds, Series 2021 (the "Series 2021 Bonds"), on behalf of the Sewerage and Water Board of New Orleans (the "Board") for the purpose of: (i) refunding a portion of the outstanding Water Revenue and Refunding Bonds, Series 2014 and the Water Revenue Bonds, Series 2015 (collectively, the "Prior Bonds"); (ii) funding the applicable debt service reserve account; and (iii) paying costs of issuance of the Series 2021 Bonds. The Series 2021 Bonds are being sold by the Board of Liquidation, City Debt, a body corporate which serves as the custodian to several agencies of the City, including the Board.

The Series 2021 Bonds are being initially issued as fully registered bonds, in authorized 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. DTC will act as securities depository for the Series 2021 Bonds. Purchasers of the Series 2021 Bonds will not receive certificates representing their interest in the Series 2021 Bonds purchased. Purchases of the Series 2021 Bonds will be made only in book-entry form in authorized denominations by credit to participating broker-dealers and other institutions on the books of DTC, as described herein. Principal of and interest on the Series 2021 Bonds will be payable by The Bank of New York Mellon Trust Company, N.A., in the City of Jacksonville, Florida, or any successor paying agent (the "Paying Agent") to DTC, which will remit such payments in accordance with its normal procedures, as described herein. Interest on the Series 2021 Bonds is payable on June 1, 2021 and semiannually thereafter on June 1 and December 1 of each year. See APPENDIX "I"- DTC BOOK-ENTRY ONLY SYSTEM herein.

The Series 2021 Bonds are subject to optional and mandatory redemption as described under the caption titled "SERIES 2021 BONDS – Redemption Provisions" herein.

The Series 2021 Bonds are being issued under the General Water Revenue Bond Resolution of the Board and the Third Supplemental Water Revenue Bond Resolution thereto and are secured by and payable solely from Net Revenues on a parity with the City's unrefunded Water Revenue and Refunding Bonds, Series 2014, the City's unrefunded Water Revenue Bonds, Series 2015, and any other Senior Debt that may be issued in the future. The revenues of the City's Sewerage System and the Drainage System are not pledged as security for the payment of the Series 2021 Bonds. **The Series 2021 Bonds do not constitute a general obligation of the City, and neither the credit nor the taxing power of the City is pledged to the payment thereof, or any part thereof, or to the payment of any interest thereon.** 

The scheduled payment of principal of and interest on the Series 2021 Bonds when due will be guaranteed under an insurance policy to be issued concurrently with the delivery of the Insured Bonds by ASSURED GUARANTY MUNICIPAL CORP.



#### The Maturity Schedule for the Series 2021 Bonds appears on the inside cover of this Official Statement.

The Series 2021 Bonds are offered when, as and if issued by the Issuer and accepted by the Underwriters, subject to the joint approving opinions of Foley & Judell, L.L.P. and Auzenne & Associates, L.L.C., each of New Orleans, Louisiana, Co-Bond Counsel. PFM Financial Advisors LLC, and CLB Porter, LLC, each of New Orleans, Louisiana, serve as Co-Financial Advisors to the Board of Liquidation in connection with the sale and issuance of the Series 2021 Bonds. Certain legal matters will be passed upon for the Underwriters by Butler Snow LLP, Baton Rouge, Louisiana, Underwriters' Counsel. It is expected that the Series 2021 Bonds will be delivered in book-entry only form to DTC on or about March 3, 2021, against payment therefor.

J.P. Morgan

**BofA Securities** 

**Loop Capital Markets** 

Ramirez & Co., Inc.

**Raymond James** 

**Wells Fargo Securities** 

The date of this Official Statement is February 4, 2021. This page and the inside cover page contain information for quick reference only. They are 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.

# \$194,300,000 CITY OF NEW ORLEANS, LOUISIANA TAXABLE WATER REVENUE REFUNDING BONDS, SERIES 2021

## MATURITY SCHEDULE (Base CUSIP No. 647753)†

Year (December 1)	Principal Amount	Interest Rate	Price	CUSIPs†	ISIN†	Common Code*
2022	\$2,500,000	0.415%	100.000	647753 LX8	US647753LX88	230304858
2023	2,515,000	0.465	100.000	647753 LY6	US647753LY61	230304874
2024	2,525,000	0.639	100.000	647753 LZ3	US647753LZ37	230304866
2025	2,540,000	0.858	100.000	647753 MA7	US647753MA76	230304882
2026	2,565,000	1.008	100.000	647753 MB5	US647753MB59	230304912
2027	5,300,000	1.259	100.000	647753 MC3	US647753MC33	230304904
2028	5,370,000	1.459	100.000	647753 MD1	US647753MD16	230304939
2029	8,330,000	1.691	100.000	647753 ME9	US647753ME98	230304955
2030	8,475,000	1.841	100.000	647753 MF6	US647753MF63	230304947
2031	8,630,000	1.941	100.000	647753 MG4	US647753MG47	230304963
2032	8,800,000	2.041	100.000	647753 MH2	US647753MH20	230304980
2033	8,980,000	2.141	100.000	647753 MJ8	US647753MJ85	230304971
2034	9,170,000	2.241	100.000	647753 MK5	US647753MK58	230304998
2035	9,375,000	2.291	100.000	647753 ML3	US647753ML32	230305021
2036	9,590,000	2.341	100.000	647753 MM1	US647753MM15	230305005

\$51,950,000 2.889% Term Bond due December 1, 2041, Price 100.000, CUSIP† 647753MN9, ISIN† US647753MN97, Common Code\* 230305013

\$47,685,000 2.989% Term Bond due December 1, 2045, Price 100.000, CUSIP† 647753MP4, ISIN† US647753MP46, Common Code\* 230305056

†CUSIP® is a registered trademark of the American Bankers Association ("ABA"). CUSIP data herein is provided by CUSIP Global Services, which is managed on behalf of S&P Capital I.Q., a division of McGraw Hill Financial. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP Service. CUSIP and ISIN data herein is provided for convenience of reference only. Neither the Issuer or the Co-Financial Advisors nor their agents or counsel take any responsibility for the accuracy of such data now or at any time in the future. The CUSIP and/or ISIN number for a specific maturity is subject to being changed after the issuance of the Series 2021 Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Series 2021 Bonds.

\*The Common Code is provided herein by Euroclear Bank S.A./N.V. Neither the Issuer or the Co-Financial Advisors nor their agents or counsel are responsible for the selection or the use of this Common Code and no representation is made as to their correctness on the Series 2021 Bonds.

# CITY OF NEW ORLEANS, LOUISIANA

#### **MAYOR**

LaToya Cantrell

## **CITY COUNCIL**

Helena N. Moreno, Councilmember at Large, President
Donna Glapion, Councilmember at Large, Vice President
Joseph I. Giarrusso III, Councilmember District "A"
Jay H. Banks, Councilmember District "B"
Kristin G. Palmer, Councilmember District "C"
Jared C. Brossett, Councilmember District "D"
Cyndi Nguyen, Councilmember District "E"

## **BOARD OF LIQUIDATION, CITY DEBT**

Mary K. Zervigon, President Henry F. O'Connor, Jr., Vice President

LaToya Cantrell, ex officio

Donna Glapion, ex officio

Todd O. McDonald

Ralph W. Johnson

Lynes R. Sloss

David W. Gernhauser, Secretary

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

## **Board of Directors**

LaToya Cantrell, Mayor, President Jay H. Banks, Councilmember Robin Barnes Tamika Duplessis, Ph.D. Alejandra Guzman Ralph Johnson Joseph Peychaud Lynes R. Sloss Maurice G. Sholas, M.D., Ph.D. Janet Howard

#### **Executive Staff**

Ghassan Korban, Executive Director Christy Harowski, Chief of Staff Robert Turner, General Superintendent E. Grey Lewis, Chief Financial Officer Courtney Barnes, Communications Director Yolanda Grinstead, Special Counsel David Callahan, Chief Administrative Officer

## **CONSULTANTS AND ADVISORS**

**Co-Bond Counsel** Foley & Judell, L.L.P.

Auzenne & Associates, L.L.C.

**Co-Financial Advisors** PFM Financial Advisors LLC

CLB Porter, LLC

**Underwriters' Counsel** Butler Snow LLP

**Auditors, Sewerage and Water Board** Postlethwaite & Netterville, APAC

Auditors, Board of Liquidation Paciera, Gautreau & Priest, LLC

**Legal Counsel, Board of Liquidation** William R. Forrester, Esq.

## **IMPORTANT NOTICES**

This Official Statement is provided in connection with the issuance of the Series 2021 Bonds referred to herein and may not be reproduced or be used, in whole or in part, for any other purpose. The information contained in this Official Statement has been derived from information provided by the Board, the City, the Board of Liquidation and other sources which are believed to be reliable. Additional information, including financial information, concerning the Board, the City, or the Board of Liquidation is available from each entity's respective website. Any such information that is inconsistent with the information set forth in this Official Statement should be disregarded. The information set forth herein concerning The Depository Trust Company ("DTC") has been furnished by DTC, and no representation is made by the Board, the City, the Board of Liquidation or the Underwriters as to the completeness or accuracy of such information.

No dealer, broker, salesperson or other person has been authorized by the Board, the City, the Board of Liquidation or the Underwriters to give any information or to make any representations with respect to this offering, other than as contained in this Official Statement and, if given or made, such other information or representations must not be relied upon as having been authorized by the Board, the City, the Board of Liquidation or the Underwriters. 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 2021 Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information and expressions of opinion contained herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in such information since the date thereof.

The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, its respective responsibility to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

Assured Guaranty Municipal Corp. ("AGM") makes no representation regarding the Series 2021 Bonds or the advisability of investing in the Series 2021 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 herein under the heading "BOND INSURANCE" and Appendix "J" attached hereto.

THE SERIES 2021 BONDS HAVE NOT BEEN REGISTERED WITH THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION UNDER THE SECURITIES ACT OF 1933, AS AMENDED, IN RELIANCE UPON EXCEPTIONS CONTAINED IN THE ACT. NEITHER THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THE SERIES 2021 BONDS OR PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE SERIES 2021 BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

THIS OFFICIAL STATEMENT IS BEING PROVIDED TO PROSPECTIVE PURCHASERS EITHER IN BOUND PRINTED FORM ("ORIGINAL BOUND FORMAT") OR IN ELECTRONIC FORMAT ON

THE FOLLOWING WEBSITES: <a href="www.munios.com">www.munios.com</a> and <a href="www.bolcd.com">www.bolcd.com</a>. THIS OFFICIAL STATEMENT MAY BE RELIED UPON ONLY IF IT IS IN ITS ORIGINAL BOUND FORMAT OR AS PRINTED IN ITS ENTIRETY DIRECTLY FROM SUCH WEBSITES.

## Cautionary Statements Regarding Forward-Looking Statements in this Official Statement

This Official Statement is marked with a dated date and speaks only as of that dated date. Readers are cautioned not to assume that any information has been updated beyond the dated date except as to any portion of the Official Statement that expressly states that it constitutes an update concerning specific recent events occurring after the dated date of the Official Statement. Any information contained in the portion of the Official Statement indicated to concern recent events speaks only as of its date. The City, the Board of Liquidation and the Board expressly disclaim any duty to provide an update of any information contained in this Official Statement, except as agreed upon by said parties pursuant to the Proposed Form of Continuing Disclosure Certificate attached hereto as APPENDIX "H".

The information contained in this Official Statement may include forward-looking statements by using forward-looking words such as "may," "will," "should," "expects," "believes," "anticipates," "estimates," "budgets" or others. The reader is cautioned that forward-looking statements are subject to a variety of uncertainties that could cause actual results to differ from the projected results. Those risks and uncertainties include general economic and business conditions, and various other factors which are beyond the control of the City, the Board of Liquidation and the Board.

This Official Statement contains projections of revenues, expenditures and other matters. Because the City, the Board of Liquidation and the Board cannot predict all factors that may affect future decisions, actions, events or financial circumstances, what actually happens may be different from what is included in forward-looking statements.

# INFORMATION CONCERNING OFFERING RESTRICTIONS IN CERTAIN JURISDICTIONS OUTSIDE THE UNITED STATES

ANY REFERENCES IN THIS OFFICIAL STATEMENT TO THE "ISSUER" MEAN THE CITY OF NEW ORLEANS, LOUISIANA, AND REFERENCES TO "BONDS" OR "SECURITIES" MEAN THE TAXABLE WATER REVENUE REFUNDING BONDS, SERIES 2021 OFFERED HEREBY. NEITHER THE ISSUER NOR THE UNDERWRITERS ASSUME ANY RESPONSIBILITY FOR THE CONTENTS OF THIS SECTION.

#### MINIMUM UNIT SALES

THE BONDS WILL TRADE AND SETTLE ON A UNIT BASIS (ONE UNIT EQUALING ONE BOND OF \$5,000 PRINCIPAL AMOUNT). FOR ANY SALES MADE OUTSIDE THE UNITED STATES, THE MINIMUM PURCHASE AND TRADING AMOUNT IS 30 UNITS (BEING 30 BONDS IN AN AGGREGATE PRINCIPAL AMOUNT OF \$150,000).

# NOTICE TO PROSPECTIVE INVESTORS IN THE EUROPEAN ECONOMIC AREA ("EEA") OR THE UNITED KINGDOM

THE BONDS ARE NOT INTENDED TO BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO AND SHOULD NOT BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO ANY RETAIL INVESTOR IN THE EEA. FOR THESE PURPOSES, A "RETAIL INVESTOR" MEANS A PERSON WHO IS ONE (OR MORE) OF: (I) A RETAIL CLIENT AS DEFINED IN POINT (11) OF ARTICLE 4(1) OF DIRECTIVE 2014/65/EU (AS AMENDED, "MIFID II"); (II) A CUSTOMER WITHIN THE MEANING OF DIRECTIVE (EU) 2016/97 (THE "INSURANCE DISTRIBUTION DIRECTIVE"), WHERE THAT CUSTOMER WOULD NOT QUALIFY AS A PROFESSIONAL CLIENT AS DEFINED IN POINT (10) OF ARTICLE 4(1) OF MIFID II; OR (III) NOT A QUALIFIED INVESTOR AS DEFINED IN REGULATION (EU) 2017/1129 (THE "PROSPECTUS REGULATION"). CONSEQUENTLY, NO KEY INFORMATION DOCUMENT REQUIRED BY REGULATION (EU) NO. 1286/2014 (AS AMENDED, THE "PRIIPS REGULATION") FOR OFFERING OR SELLING THE BONDS OR OTHERWISE MAKING THEM AVAILABLE TO RETAIL INVESTORS IN THE EEA HAS BEEN PREPARED AND THEREFORE OFFERING OR SELLING THE BONDS OR OTHERWISE MAKING THEM AVAILABLE TO ANY RETAIL INVESTOR IN THE EEA MAY BE UNLAWFUL UNDER THE PRIIPS REGULATION.

THE BONDS ARE NOT INTENDED TO BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO AND SHOULD NOT BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO ANY RETAIL INVESTOR IN THE UNITED KINGDOM. FOR THESE PURPOSES, A "RETAIL INVESTOR" MEANS A PERSON WHO IS ONE (OR MORE) OF: (I) A RETAIL CLIENT, AS DEFINED IN POINT (8) OF ARTICLE 2 OF REGULATION (EU) NO 2017/565 AS IT FORMS PART OF DOMESTIC LAW BY VIRTUE OF THE EUROPEAN UNION (WITHDRAWAL) ACT 2018 ("EUWA"); (II) A CUSTOMER WITHIN THE MEANING OF THE PROVISIONS OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 (THE "FSMA") AND ANY RULES OR REGULATIONS MADE UNDER THE FSMA TO IMPLEMENT DIRECTIVE (EU) 2016/97, WHERE THAT CUSTOMER WOULD NOT QUALIFY AS A PROFESSIONAL CLIENT, AS DEFINED IN POINT (8) OF ARTICLE 2(1) OF REGULATION (EU) NO 600/2014 AS IT FORMS PART OF DOMESTIC LAW BY VIRTUE OF THE EUWA; OR (III) NOT A QUALIFIED INVESTOR AS DEFINED IN ARTICLE 2 OF REGULATION (EU) 2017/1129 AS IT FORMS PART OF DOMESTIC LAW BY VIRTUE OF THE EUWA. CONSEQUENTLY, NO KEY INFORMATION DOCUMENT REQUIRED BY REGULATION (EU) NO 1286/2014 AS IT FORMS PART OF DOMESTIC LAW BY VIRTUE OF THE EUWA (THE "UK PRIIPS REGULATION") FOR OFFERING OR SELLING THE BONDS OR OTHERWISE MAKING THEM AVAILABLE TO RETAIL INVESTORS IN THE UNITED KINGDOM HAS BEEN PREPARED AND THEREFORE OFFERING OR SELLING THE BONDS OR OTHERWISE MAKING THEM AVAILABLE TO ANY RETAIL INVESTOR IN THE UNITED KINGDOM MAY BE UNLAWFUL UNDER THE UK PRIIPS REGULATION.

THIS OFFICIAL STATEMENT HAS BEEN PREPARED ON THE BASIS THAT ALL OFFERS OF THE BONDS TO ANY PERSON THAT IS LOCATED WITHIN A MEMBER STATE OF THE EEA OR THE UNITED KINGDOM WILL BE MADE PURSUANT TO AN EXEMPTION UNDER ARTICLE 1(4) OF THE PROSPECTUS REGULATION OR SECTION 86 OF THE FSMA (IN EACH CASE AS APPLICABLE) FROM THE REQUIREMENT TO PRODUCE A PROSPECTUS FOR OFFERS OF THE BONDS. ACCORDINGLY, ANY PERSON MAKING OR INTENDING TO MAKE ANY OFFER IN THE EEA OR THE UNITED KINGDOM OF THE BONDS SHOULD ONLY DO SO IN CIRCUMSTANCES IN WHICH NO OBLIGATION ARISES FOR THE ISSUER OR ANY OF THE UNDERWRITERS TO PROVIDE A PROSPECTUS FOR SUCH OFFER. NEITHER THE ISSUER NOR THE UNDERWRITERS HAVE AUTHORIZED, NOR DO THEY AUTHORIZE, THE MAKING OF ANY OFFER OF BONDS THROUGH ANY FINANCIAL INTERMEDIARY, OTHER THAN OFFERS MADE BY THE UNDERWRITERS, WHICH CONSTITUTE THE FINAL PLACEMENT OF THE BONDS CONTEMPLATED IN THIS OFFICIAL STATEMENT.

FOR THE PURPOSES OF THIS PROVISION, THE EXPRESSION AN "OFFER OF SECURITIES TO THE PUBLIC" IN RELATION TO THE BONDS IN ANY MEMBER STATE OF THE EEA OR THE UNITED KINGDOM MEANS THE COMMUNICATION IN ANY FORM AND BY ANY MEANS OF SUFFICIENT INFORMATION ON THE TERMS OF THE OFFER AND THE BONDS TO BE OFFERED SO AS TO ENABLE AN INVESTOR TO DECIDE TO PURCHASE THE BONDS OR SUBSCRIBE FOR THE BONDS.

EACH SUBSCRIBER FOR OR PURCHASER OF THE BONDS IN THE OFFERING LOCATED WITHIN A MEMBER STATE OF THE EEA OR THE UNITED KINGDOM WILL BE DEEMED TO HAVE REPRESENTED, ACKNOWLEDGED AND AGREED THAT IT IS A "QUALIFIED INVESTOR" AS DEFINED IN THE PROSPECTUS REGULATION AND IN ARTICLE 2 OF REGULATION (EU) 2017/1129 AS IT FORMS PART OF DOMESTIC LAW BY VIRTUE OF THE EUWA. THE ISSUER AND EACH UNDERWRITER AND OTHERS WILL RELY ON THE TRUTH AND ACCURACY OF THE FOREGOING REPRESENTATION, ACKNOWLEDGEMENT AND AGREEMENT.

#### ADDITIONAL NOTICE TO PROSPECTIVE INVESTORS IN THE UNITED KINGDOM

THIS OFFICIAL STATEMENT HAS NOT BEEN APPROVED FOR THE PURPOSES OF SECTION 21 OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 ("FSMA") AND DOES NOT CONSTITUTE AN OFFER TO THE PUBLIC IN ACCORDANCE WITH THE PROVISIONS OF SECTION 85 OF THE FSMA. THIS OFFICIAL STATEMENT IS FOR DISTRIBUTION ONLY TO, AND IS DIRECTED SOLELY AT, PERSONS WHO (I) ARE OUTSIDE THE UNITED KINGDOM, (II) ARE INVESTMENT PROFESSIONALS, AS SUCH TERM IS DEFINED IN ARTICLE 19(5) OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 (FINANCIAL PROMOTION) ORDER 2005, AS AMENDED (THE "FINANCIAL PROMOTION ORDER"), (III) ARE PERSONS FALLING WITHIN ARTICLE 49(2)(A) TO (D) OF THE FINANCIAL PROMOTION ORDER, OR (IV) ARE PERSONS TO WHOM AN INVITATION OR INDUCEMENT TO ENGAGE IN INVESTMENT ACTIVITY (WITHIN THE MEANING OF SECTION 21 OF THE FSMA) IN CONNECTION WITH THE ISSUE OR SALE OF ANY SECURITIES MAY OTHERWISE BE LAWFULLY COMMUNICATED OR CAUSED TO BE COMMUNICATED (ALL SUCH PERSONS TOGETHER BEING REFERRED TO AS "RELEVANT PERSONS"). THIS OFFICIAL STATEMENT IS DIRECTED ONLY AT RELEVANT PERSONS AND

MUST NOT BE ACTED ON OR RELIED ON BY PERSONS WHO ARE NOT RELEVANT PERSONS. ANY INVESTMENT OR INVESTMENT ACTIVITY TO WHICH THIS OFFICIAL STATEMENT RELATES IS AVAILABLE ONLY TO RELEVANT PERSONS AND WILL BE ENGAGED IN ONLY WITH RELEVANT PERSONS. ANY PERSON WHO IS NOT A RELEVANT PERSON SHOULD NOT ACT OR RELY ON THIS OFFICIAL STATEMENT OR ANY OF ITS CONTENTS.

#### NOTICE TO PROSPECTIVE INVESTORS IN SWITZERLAND

THIS OFFICIAL STATEMENT IS NOT INTENDED TO CONSTITUTE AN OFFER OR A SOLICITATION TO PURCHASE OR INVEST IN THE BONDS. THE BONDS MAY NOT BE PUBLICLY OFFERED, DIRECTLY OR INDIRECTLY, IN SWITZERLAND WITHIN THE MEANING OF THE SWISS FINANCIAL SERVICES ACT ("FINSA") AND NO APPLICATION HAS OR WILL BE MADE TO ADMIT THE BONDS TO TRADING ON ANY TRADING VENUE (EXCHANGE OR MULTILATERAL TRADING FACILITY) IN SWITZERLAND. NEITHER THIS OFFICIAL STATEMENT NOR ANY OTHER OFFERING OR MARKETING MATERIAL RELATING TO THE BONDS CONSTITUTES A PROSPECTUS PURSUANT TO (I) THE FINSA OR (II) THE LISTING RULES OF THE SIX SWISS EXCHANGE AG OR ANY OTHER REGULATED TRADING VENUE IN SWITZERLAND AND NEITHER THIS OFFICIAL STATEMENT NOR ANY OTHER OFFERING OR MARKETING MATERIAL RELATING TO THE BONDS MAY BE PUBLICLY DISTRIBUTED OR OTHERWISE MADE PUBLICLY AVAILABLE IN SWITZERLAND. THIS OFFICIAL STATEMENT WILL NOT BE REVIEWED NOR APPROVED BY A REVIEWING BODY FOR PROSPECTUSES (PRÜFSTELLE).

NONE OF THIS OFFICIAL STATEMENT OR ANY OTHER OFFERING OR MARKETING MATERIAL RELATING TO THE OFFERING, THE ISSUER OR THE BONDS HAVE BEEN OR WILL BE FILED WITH OR APPROVED BY ANY SWISS REGULATORY AUTHORITY. IN PARTICULAR, THIS OFFICIAL STATEMENT WILL NOT BE FILED WITH, AND THE OFFER OF THE BONDS WILL NOT BE SUPERVISED BY, THE SWISS FINANCIAL MARKET SUPERVISORY AUTHORITY ("FINMA"), AND THE OFFER OF BONDS HAS NOT BEEN AND WILL NOT BE AUTHORIZED UNDER THE SWISS FEDERAL ACT ON COLLECTIVE INVESTMENT SCHEMES ("CISA"). ACCORDINGLY, INVESTORS DO NOT HAVE THE BENEFIT OF THE SPECIFIC INVESTOR PROTECTION PROVIDED UNDER THE CISA.

THIS OFFICIAL STATEMENT DOES NOT CONSTITUTE INVESTMENT ADVICE. IT MAY ONLY BE USED BY THOSE PERSONS TO WHOM IT HAS BEEN HANDED OUT IN CONNECTION WITH THE BONDS AND MAY NEITHER BE COPIED NOR DIRECTLY OR INDIRECTLY DISTRIBUTED OR MADE AVAILABLE TO OTHER PERSONS.

#### NOTICE TO PROSPECTIVE INVESTORS IN HONG KONG

THE CONTENTS OF THIS OFFICIAL STATEMENT HAVE NOT BEEN REVIEWED BY ANY REGULATORY AUTHORITY IN HONG KONG. YOU ARE ADVISED TO EXERCISE CAUTION IN RELATION TO THE BONDS. IF YOU ARE IN ANY DOUBT ABOUT ANY OF THE CONTENTS OF THIS OFFICIAL STATEMENT, YOU SHOULD OBTAIN INDEPENDENT PROFESSIONAL ADVICE.

THIS OFFICIAL STATEMENT HAS NOT BEEN REGISTERED BY THE REGISTRAR OF COMPANIES IN HONG KONG PURSUANT TO THE COMPANIES (WINDING UP AND MISCELLANEOUS PROVISIONS) ORDINANCE (CHAPTER 32) OF THE LAWS OF HONG KONG ("C(WUMP)O").

ACCORDINGLY: (I) THE BONDS MAY NOT BE OFFERED OR SOLD IN HONG KONG BY MEANS OF ANY DOCUMENT OTHER THAN TO PERSONS WHO ARE "PROFESSIONAL INVESTORS" AS DEFINED IN THE SECURITIES AND FUTURES ORDINANCE (CHAPTER 571) OF THE LAWS OF HONG KONG ("SFO") AND ANY RULES MADE UNDER THE SFO, OR IN OTHER CIRCUMSTANCES WHICH DO NOT RESULT IN THE DOCUMENT BEING A "PROSPECTUS" AS DEFINED IN SECTION 2(1) OF THE C(WUMP)O OR WHICH DO NOT CONSTITUTE AN OFFER TO THE PUBLIC WITHIN THE MEANING OF THE C(WUMP)O; AND (II) NO PERSON MAY ISSUE OR HAVE IN ITS POSSESSION FOR THE PURPOSES OF ISSUE, WHETHER IN HONG KONG OR ELSEWHERE, ANY ADVERTISEMENT, INVITATION OR DOCUMENT RELATING TO THE BONDS, WHICH IS DIRECTED AT, OR THE CONTENTS OF WHICH ARE LIKELY TO BE ACCESSED OR READ BY, THE PUBLIC OF HONG KONG (EXCEPT IF PERMITTED TO DO SO UNDER THE SECURITIES LAWS OF HONG KONG) OTHER THAN WITH RESPECT TO BONDS WHICH ARE OR ARE INTENDED TO BE DISPOSED OF ONLY TO PERSONS OUTSIDE HONG KONG OR ONLY TO "PROFESSIONAL INVESTORS" AS DEFINED IN THE SFO AND ANY RULES MADE UNDER THE SFO.

#### NOTICE TO PROSPECTIVE INVESTORS IN JAPAN

THE BONDS HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE FINANCIAL INSTRUMENTS AND EXCHANGE ACT OF JAPAN (ACT NO. 25 OF 1948, AS AMENDED, THE "FIEA"). NEITHER THE BONDS NOR ANY INTEREST THEREIN MAY BE OFFERED OR SOLD, DIRECTLY OR INDIRECTLY, IN JAPAN OR TO, OR FOR THE BENEFIT OF, ANY RESIDENT OF JAPAN (AS DEFINED UNDER ITEM 5, PARAGRAPH 1, ARTICLE 6 OF THE FOREIGN EXCHANGE AND FOREIGN TRADE ACT (ACT NO. 228 OF 1949, AS AMENDED)), OR TO OTHERS FOR RE-OFFERING OR RESALE, DIRECTLY OR INDIRECTLY, IN JAPAN OR TO, OR FOR THE BENEFIT OF, ANY RESIDENT OF JAPAN, EXCEPT PURSUANT TO AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF, AND OTHERWISE IN COMPLIANCE WITH, THE FIEA AND ANY OTHER APPLICABLE LAWS, REGULATIONS AND MINISTERIAL GUIDELINES OF JAPAN.

THE PRIMARY OFFERING OF THE BONDS AND THE SOLICITATION OF AN OFFER FOR ACQUISITION THEREOF HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER PARAGRAPH 1, ARTICLE 4 OF THE FIEA. AS IT IS A PRIMARY OFFERING, IN JAPAN, THE BONDS MAY ONLY BE OFFERED, SOLD, RESOLD OR OTHERWISE TRANSFERRED, DIRECTLY OR INDIRECTLY TO, OR FOR THE BENEFIT OF CERTAIN QUALIFIED INSTITUTIONAL INVESTORS AS DEFINED IN THE FIEA ("QIIS") IN RELIANCE ON THE QIISONLY PRIVATE PLACEMENT EXEMPTION AS SET FORTH IN ITEM 2(I), PARAGRAPH 3, ARTICLE 2 OF THE FIEA. A QII WHO PURCHASED OR OTHERWISE OBTAINED THE BONDS CANNOT RESELL OR OTHERWISE TRANSFER THE BONDS IN JAPAN TO ANY PERSON EXCEPT ANOTHER QII.

## NOTICE TO PROSPECTIVE INVESTORS IN TAIWAN

THE OFFER OF THE BONDS HAS NOT BEEN AND WILL NOT BE REGISTERED OR FILED WITH, OR APPROVED BY, THE FINANCIAL SUPERVISORY COMMISSION OF TAIWAN AND/OR OTHER REGULATORY AUTHORITY OF TAIWAN PURSUANT TO RELEVANT SECURITIES LAWS AND REGULATIONS, AND THE BONDS MAY NOT BE OFFERED, ISSUED OR SOLD IN TAIWAN THROUGH A PUBLIC OFFERING OR IN CIRCUMSTANCES WHICH

CONSTITUTE AN OFFER WITHIN THE MEANING OF THE SECURITIES AND EXCHANGE ACT OF TAIWAN THAT REQUIRES THE REGISTRATION OR FILING WITH OR APPROVAL OF THE FINANCIAL SUPERVISORY COMMISSION OF TAIWAN. THE BONDS MAY BE MADE AVAILABLE OUTSIDE TAIWAN FOR PURCHASE BY INVESTORS RESIDING IN TAIWAN (EITHER DIRECTLY OR THROUGH PROPERLY LICENSED TAIWAN INTERMEDIARIES), BUT MAY NOT BE OFFERED OR SOLD IN TAIWAN EXCEPT TO QUALIFIED INVESTORS VIA A TAIWAN LICENSED INTERMEDIARY, TO THE EXTENT PERMITTED UNDER APPLICABLE LAWS AND REGULATIONS. ANY SUBSCRIPTIONS OF BONDS SHALL ONLY BECOME EFFECTIVE UPON ACCEPTANCE BY THE ISSUER OR THE RELEVANT DEALER OUTSIDE TAIWAN AND SHALL BE DEEMED A CONTRACT ENTERED INTO IN THE JURISDICTION OF INCORPORATION OF THE ISSUER OR RELEVANT DEALER, AS THE CASE MAY BE, UNLESS OTHERWISE SPECIFIED IN THE SUBSCRIPTION DOCUMENTS RELATING TO THE BONDS SIGNED BY THE INVESTORS.

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#### OFFICIAL STATEMENT

# \$194,300,000 CITY OF NEW ORLEANS, LOUISIANA TAXABLE WATER REVENUE REFUNDING BONDS, SERIES 2021

#### INTRODUCTION

#### General

This Official Statement, including the cover page and the appendices hereto (the "Official Statement"), of the City of New Orleans, Louisiana (the "Issuer" or the "City"), provides information with respect to the referenced Taxable Water Revenue Refunding Bonds, Series 2021 (the "Series 2021 Bonds"). The Series 2021 Bonds are being issued by the City, for and on behalf of the Sewerage and Water Board of New Orleans (the "Board") pursuant to the Act (hereinafter defined) and pursuant to the General Water Revenue Bond Resolution adopted by the Board on May 21, 2014 (the "General Bond Resolution"), as amended and supplemented to and including the Third Supplemental Water Revenue Bond Resolution adopted by the Board on January 20, 2021 (the "Third Supplemental Resolution" and, together with the General Bond Resolution, the "Bond Resolution"). The General Bond Resolution was approved by the Council of the City of New Orleans (the "City Council") by resolution adopted on June 5, 2014, and by the Board of Liquidation, City Debt (the "Board of Liquidation") by resolution adopted on May 29, 2014. The Third Supplemental Resolution was approved by the City Council by resolution adopted on January 28, 2021, and by the Board of Liquidation by resolution adopted on January 20, 2021. The Board of Liquidation is responsible for the sale of the Series 2021 Bonds and maintenance of certain funds described herein.

Capitalized terms used in this Official Statement and not otherwise defined herein shall have the meanings ascribed thereto in APPENDIX "F" - GENERAL BOND RESOLUTION - Definitions attached hereto. Reference in this Official Statement to owner, holder, registered owner, Series 2021 Bondholder or Series 2021 Bond owner means the registered owner of the Series 2021 Bonds determined in accordance with the Bond Resolution.

The Series 2021 Bonds are being issued in the name of the City, for and on behalf of the Board, an independent board of the City created by State statute and charged with maintaining and operating a public sanitary sewerage system (the "Sewerage System"), a water treatment and distribution system (the "Water System"), and a drainage system (the "Drainage System") for the City. The Series 2021 Bonds are being issued to lower the overall debt service on the Refunded Bonds that were issued for the benefit of the Water System.

This Official Statement includes brief descriptions of the Issuer, the Board, the Board of Liquidation, the Series 2021 Bonds, the Bond Resolution, the Act (hereinafter defined), and other proceedings. Such descriptions and the summaries of and references to all documents, statutes, reports and other instruments referred to herein do not purport to be comprehensive or definitive, and each such document, statute, report or instrument is qualified in its entirety by reference to each such document, statute, report or instrument, copies of which are available from the Board. All references to the Series 2021 Bonds are qualified in their entirety by reference to the definitive forms thereof and the information with respect thereto contained in the Bond Resolution. Insofar as any statements are made in this Official Statement involving matters of opinion, regardless of whether expressly so stated, they are intended merely as such and not as representations of fact.

Additional information about the City is included in APPENDIX "B" attached hereto. The Comprehensive Annual Financial Report of the Board for the year ended December 31, 2019, is included in APPENDIX "C" attached hereto. The Engineering Report for the Water System by Black & Veatch Corporation (the "Consulting Engineer's Report") is included in APPENDIX "D" attached hereto. The Financial Feasibility Report for the Water System by Raftelis Financial Consultants, Inc. (the "Financial Feasibility Report") is included in APPENDIX "E" attached hereto. The proposed form of the joint legal opinion of Foley & Judell, L.L.P. and Auzenne & Associates, L.L.C., each of New Orleans, Louisiana, Co-Bond Counsel, is included in APPENDIX "G" hereto.

The information in this Official Statement is subject to change without notice, and neither the delivery of this Official Statement, nor any sale made hereunder shall under any circumstances create an implication that there has been no change in the affairs of the Board since the date hereof. This Official Statement is not to be construed as a contract or agreement between the Board, the City or the Underwriters and the purchasers or owners of any of the Series 2021 Bonds.

Inquiries regarding information about the Board and the financial matters contained in this Official Statement may be directed to the Executive Director of the Board at (504) 585-2190. Inquiries regarding information about the City and the Board of Liquidation contained in this Official Statement may be directed to the Secretary of the Board of Liquidation at (504) 658-1410.

## **The City of New Orleans**

The City, located in southeastern Louisiana approximately 110 miles from the mouth of the Mississippi River, was founded in 1718 and incorporated in 1805. With an estimated 2019 population of 390,144, it is the largest populated city located within the boundaries of the State. The City consists of approximately 199.4 square miles of land, of which approximately 75 square miles are developed, and approximately 164.1 square miles of water. The City's system of government is established in its Home Rule Charter, which provides for a Mayor-Council plan of government. See APPENDIX "B" – FINANCIAL AND STATISTICAL DATA RELATIVE TO THE CITY OF NEW ORLEANS attached hereto for more financial, economic and demographic information of the City.

## The Sewerage and Water Board of New Orleans

The Board was created by the Louisiana Legislature in 1899 as a "special board" operating independently of the government of the City. Its purpose is to construct, maintain and operate the City's Water, Sewer and Drainage Systems. The Board consists of eleven members, including the Mayor, the chair of the Public Works, Sanitation and Environment Committee of the New Orleans City Council or his designee, two members of the Board of Liquidation and seven citizens of the City whom each have experience in pertinent fields. The Board appoints an Executive Director who is tasked with leading a team of executives and staff in the daily operations of the water, sewer and drainage functions. The service area of the Water System covers nearly 86 miles and serves approximately 383,000 people. See "SEWERAGE AND WATER BOARD OF NEW ORLEANS" and "THE WATER SYSTEM" herein for more information on the Board and its service area.

## The Board of Liquidation, City Debt

The Series 2021 Bonds are being sold by the Board of Liquidation, a body corporate created by the Louisiana Legislature in 1880 and which serves as custodian to several agencies of the City, including the Board. Pursuant to State statute, the Board of Liquidation is responsible for fixing the details of the Series 2021 Bonds and is also responsible for holding, investing and distributing bond proceeds, debt service funds

and reserve funds and for paying principal of and interest on the Series 2021 Bonds solely from Net Revenues transferred monthly to the Board of Liquidation by the Board.

## **Authorization and Purpose of the Series 2021 Bonds**

Pursuant to the Third Supplemental Resolution, the Board authorized the issuance and sale of the Series 2021 Bonds in an aggregate principal amount not to exceed \$200,000,000 for the purpose of (i) refunding a portion of the outstanding original aggregate principal amount Water Revenue and Refunding Bonds, Series 2014 and the Water Revenue Bonds, Series 2015 (such refunded maturities being the "Refunded Bonds"); (ii) funding the applicable debt service reserve account; and (iii) paying the costs of issuance of the Series 2021 Bonds. See "ESTIMATED SOURCES AND USES OF FUNDS" herein.

## **Description of the Bonds**

The Series 2021 Bonds are authorized under the provisions of the Act, and other constitutional and statutory authority, and are being issued as fully registered bonds in "book-entry only" form, in the denomination of \$5,000 or any integral multiple in excess thereof. Interest on the Series 2021 Bonds is payable on June 1, 2021, and semiannually thereafter on June 1 and December 1 of each year. The Series 2021 Bonds are subject to optional redemption as further described in "THE SERIES 2021 BONDS – Redemption Provisions" below. See "THE SERIES 2021 BONDS" herein for more information.

## **Security and Source of Payment**

The Series 2021 Bonds are payable solely from and secured, on a parity with the Outstanding Parity Bonds, as later defined, by the Net Revenues of the Water System and certain funds and accounts held under the General Bond Resolution. As defined in the General Bond Resolution, "Net Revenues" means, for any period of computation, Revenues less Operating Expenses for that period. For the General Bond Resolution's definitions of "Revenues" and "Operating Expenses," see APPENDIX "F" - GENERAL BOND RESOLUTION – Definitions attached hereto.

The Series 2021 Bonds do not constitute a general obligation of the City, and neither the credit nor the taxing power of the City is pledged to the payment thereof, or any part thereof, or to the payment of any interest thereon. The revenues of the Sewerage System and the Drainage System are not pledged as security for the payment of the Series 2021 Bonds. See "THE SERIES 2021 BONDS" herein for more information.

## **Continuing Disclosure**

Pursuant to a Continuing Disclosure Certificate with respect to the Series 2021 Bonds, the Board will covenant for the benefit of the owners of the Series 2021 Bonds to provide certain financial information and operating data relating to the Board by not later than August 31 in each year, with the first report due not later than August 31, 2021, and to provide notices of the occurrence of certain enumerated events, which, in some cases, will only be provided if deemed to be material by the Board. See "CONTINUING DISCLOSURE" herein for more information.

## **Impact of COVID-19**

In response to the COVID-19 pandemic, national and State emergency declarations are in effect, resulting in significant reductions in business, travel, and other economic activity. Because the effects of COVID-19 essentially began in March 2020 and the duration and the breadth of the effects of COVID-19 are not yet known, the total economic impact on the State, the Board and the City cannot be determined

with certainty at this time. The Board and the City continue to assess the impacts of COVID-19 on their respective financial situations and adjust operations accordingly. Neither the Board nor the City can give any assurance regarding the ongoing and lasting impact of COVID-19 on their respective operations or finances, including the revenues pledged as security for the Series 2021 Bonds. For a more detailed discussion, see "MANAGEMENT'S DISCUSSION AND ANALYSIS – Reaction to Covid-19" and "INVESTMENT CONSIDERATIONS – Covid-19 Impacts" herein.

#### THE SERIES 2021 BONDS

## **Authority for Issue**

The Series 2021 Bonds are authorized under the provisions of the Act, and other constitutional and statutory authority.

#### **Purchase of Series 2021 Bonds**

The Series 2021 Bonds are being purchased by J.P. Morgan Securities LLC, as Senior Managing Underwriter, and BofA Securities, Inc., Loop Capital Markets LLC, Samuel A. Ramirez & Co., Inc., Raymond James & Associates, Inc., and Wells Fargo Bank, National Association as Co-Managing Underwriters (collectively, the "Underwriters"). See "UNDERWRITING" herein.

#### Form of Series 2021 Bonds

The Series 2021 Bonds are being issued as fully registered bonds in "book-entry only" form and registered in the name of Cede & Co., as nominee of DTC, in the denomination of \$5,000 or any integral multiple in excess thereof. See "THE SERIES 2021 BONDS - Book-Entry Only System" herein.

## **Book-Entry Only System**

The Series 2021 Bonds will be issued in fully registered form and, when issued, will be held by DTC or its nominee, as securities depository with respect to the Series 2021 Bonds. Individual purchases of interests in the Series 2021 Bonds will be made in book-entry form only, in the principal amount of \$5,000 or any integral multiple thereof. Individual purchasers will not receive physical delivery of bond certificates. So long as Cede & Co. is the registered owner of the Series 2021 Bonds as nominee of DTC, references herein to the holders or registered owners of the Series 2021 Bonds will mean Cede & Co. and will not mean the beneficial owners of the Series 2021 Bonds. Beneficial interests in the Series 2021 Bonds may be held through DTC directly as a participant or indirectly through organizations that are participants in such system. See APPENDIX "I" - DTC BOOK-ENTRY ONLY SYSTEM attached hereto.

As long as the Series 2021 Bonds are held by DTC or its nominee, interest will be paid to Cede & Co., as nominee of DTC, in same-day funds on each Interest Payment Date. If the book-entry only system is discontinued, bond certificates will be delivered as described in the Resolution, and Beneficial Owners (as defined herein) will become registered owners of the Series 2021 Bonds (the "Bondholders"). If the book-entry only system is discontinued, interest on the Series 2021 Bonds shall be payable on each Interest Payment Date by check or draft mailed to the registered owner at the address as it appears on the 15th day of the month preceding an Interest Payment Date on the registration books kept by the Paying Agent.

Neither the Board, the Board of Liquidation, the City, the Paying Agent nor the Underwriters will have any responsibility or obligation to the Participants, DTC or the persons for whom they act with respect to (i) the accuracy of any records maintained by DTC or by any Direct or Indirect Participant of DTC, (ii) payments or the providing of notice to Direct Participants, the Indirect Participants or the beneficial owners,

(iii) the selection by DTC or by any Direct or Indirect Participant of any beneficial owner to receive payment in the event of a partial redemption of the Series 2021 Bonds or (iv) any other action taken by DTC or its partnership nominee as owner of the Series 2021 Bonds. For more information on DTC and the book-entry only system, see APPENDIX "I" - DTC BOOK-ENTRY ONLY SYSTEM attached hereto.

For information relating to the treatment of the Series 2021 Bonds if the book-entry only system is terminated, see APPENDIX "F" - General Bond Resolution - Registration and Transfer of Bonds; Persons Treated as Owners attached hereto.

## **Place of Payment**

Principal of and interest on the Series 2021 Bonds is payable by check or draft or by wire transfer by The Bank of New York Mellon Trust Company, N.A., Jacksonville, Florida, or any successor paying agent (the "Paying Agent"), to Cede & Co.

## **Payment of Interest**

Interest on the Series 2021 Bonds is payable on June 1, 2021, and semiannually thereafter on June 1 and December 1 of each year (each an "Interest Payment Date"), with interest falling due on and prior to maturity to be payable by check or by wire transfer by the Paying Agent to DTC in accordance with the terms of the DTC Representation Letter.

During any period after the initial delivery of the Series 2021 Bonds in book-entry only form when such Series 2021 Bonds are delivered in multiple certificate form, upon request of a registered owner of at least \$1,000,000 in principal amount of Series 2021 Bonds outstanding, all payments of principal and interest on such Series 2021 Bonds will be paid by wire transfer in immediately available funds to an account designated by such registered owner; CUSIP number identification with appropriate dollar amounts for each CUSIP number will accompany all payments of principal and interest, whether by check or by wire transfer.

## **Redemption Provisions**

*Optional Redemption.* Those Series 2021 Bonds maturing December 1, 2032, and thereafter, are callable for optional redemption at the option of the Board of Liquidation, at the request of the Board, in full or in part at any time on or after December 1, 2031 (the "Series 2021 Bonds Redemption Date"), at a redemption price equal to par plus accrued interest on and after the Series 2021 Bonds Redemption Date. The maturities of the Series 2021 Bonds to be redeemed shall be selected by the Board of Liquidation in its discretion.

*Make-Whole Optional Redemption*. Prior to the Series 2021 Bonds Redemption Date, the Series 2021 Bonds are subject to redemption prior to their respective maturity dates, at the option of the Board of Liquidation, at the request of the Board, in whole or in part, at a redemption price equal to the greater of:

- (1) 100% of the principal amount of the Series 2021 Bonds to be redeemed; or
- (2) The sum of the present value of the remaining scheduled payments of principal and interest to the stated maturity date of such Series 2021 Bonds to be redeemed, not including any portion of those payments of interest accrued and unpaid as of the date on which such Series 2021 Bonds are to be redeemed, discounted to the date on which such Series 2021 Bonds are to be redeemed on a semi-annual basis, assuming a 360-day year

consisting of twelve 30-day months, at the Treasury Rate (described below) plus 5 basis points for Series 2021 Bonds maturing December 1, 2022, plus 10 basis points for Series 2021 Bonds maturing December 1, 2023 to and including December 1, 2029, plus 15 basis points for Series 2021 Bonds maturing December 1, 2030 to and including December 1, 2033, and December 1, 2041, plus 20 basis points for Series 2021 Bonds maturing December 1, 2034 to and including December 1, 2036, and December 1, 2045,

Plus, in each case, accrued interest on such Series 2021 Bonds to be redeemed to but not including the redemption date.

The "Treasury Rate" is, with respect to any redemption date for a particular Series 2021 Bond, the yield to maturity as of such redemption date of United States Treasury securities with a constant maturity, excluding inflation indexed securities (as compiled and published in the most recent Federal Reserve Statistical Release H.15 (519) that has become publicly available at least two Business Days, but no more than 45 calendar days, prior to the redemption date or, if such Statistical Release is no longer published, any publicly available source of similar market data) most nearly equal to the period from the redemption date to the maturity date of the bond to be redeemed (taking into account any sinking fund installments for such bonds); provided, however, that if the period from the redemption date to such maturity date is less than one year, the weekly average yield on actually traded United States Treasury securities adjusted to a constant maturity of one year will be used.

Mandatory Sinking Fund Redemption. The Series 2021 Bonds due on December 1, 2041, shall be subject to mandatory redemption prior to maturity through application of sinking fund payments on December 1 in each of the years and in the respective principal amounts set forth below, in each case at a redemption price equal to 100% of their principal amount, plus accrued interest to the date of redemption:

Year	
(December 1)	Amount
2037	\$ 9,810,000
2038	10,095,000
2039	10,380,000
2040	10,675,000
2041*	10,990,000

<sup>\*</sup>Final maturity

The Series 2021 Bonds due on December 1, 2045, shall be subject to mandatory redemption prior to maturity through application of sinking fund payments on December 1 in each of the years and in the respective principal amounts set forth below, in each case at a redemption price equal to 100% of their principal amount, plus accrued interest to the date of redemption:

Year	
(December 1)	Amount
2042	\$ 11,305,000
2043	11,645,000
2044	11,995,000
2045*	12,740,000

<sup>\*</sup>Final maturity

Pro Rata Pass-Through Distribution of Principal Basis. If the Series 2021 Bonds are registered in book-entry only form and so long as DTC or a successor securities depository is the sole registered owner of such Series 2021 Bonds, if less than all of the Series 2021 Bonds of a maturity are called for prior redemption, the particular Series 2021 Bonds or portions thereof to be redeemed shall be allocated on a pro rata pass-through distribution of principal basis in accordance with DTC procedures, provided that, so long as the Series 2021 Bonds are held in book-entry form, the selection for redemption of such Series 2021 Bonds shall be made in accordance with the operational arrangements of DTC then in effect, and, if the DTC operational arrangements do not allow for redemption on a pro rata pass-through distribution of principal basis, the Series 2021 Bonds will be selected for redemption, in accordance with DTC procedures, by lot.

The Board of Liquidation intends that redemption allocations made by DTC be made on a pro rata pass-through distribution of principal basis as described above. However, neither the City, the Board, the Board of Liquidation nor the Underwriters can provide any assurance that DTC, DTC's direct and indirect participants or any other intermediary will allocate the redemption of the Series 2021 Bonds on such basis.

In connection with any repayment of principal, including payments of scheduled mandatory sinking fund payments, the Paying Agent/Registrar will direct DTC to make a pass-through distribution of principal to the holders of the Series 2021 Bonds. A Pro Rata Pass-Through Distribution of Principal table is included below and reflects the current schedule of mandatory sinking fund redemptions applicable to the Series 2021 Bonds and the factors applicable to such redemption amounts and remaining bond balances, which is subject to change upon certain optional redemptions.

For purposes of calculation of the "pro rata pass-through distribution of principal," "pro rata" means, for any amount of principal to be paid, the application of a fraction to each denomination of the respective Series 2021 Bonds where (a) the numerator of which is equal to the amount due to the respective bondholders on a payment date, and (b) the denominator of which is equal to the total original par amount of the respective Series 2021 Bonds.

If the Series 2021 Bonds are no longer registered in book-entry-only form, each owner will receive an amount of Series 2021 Bonds equal to the original face amount then beneficially held by that owner, registered in such investor's name. Thereafter, any redemption of less than all of the Series 2021 Bonds of any maturity will continue to be paid to the registered owners of such Series 2021 Bonds on a pro-rata basis, based on the portion of the original face amount of any such Series 2021 Bonds to be redeemed.

# PRINCIPAL PAYDOWN FACTOR TABLE PRO RATA PASS-THROUGH DISTRIBUTION OF PRINCIPAL

## \$51,950,000 Term Bond Due December 1, 2041

Principal Paydown Date	Mandatory Sinking Fund/Paydown Amounts(1)	Paydown Amount per \$5,000	Remaining Balance per \$5,000	Paydown Factor	Remaining Bond Factor
12/1/2037	\$9,810,000	944.18	4,055.82	0.188835	0.811165
12/1/2038	\$10,095,000	971.60	3,084.22	0.194321	0.616843
12/1/2039	\$10,380,000	999.04	2,085.18	0.199808	0.417036
12/1/2040	\$10,675,000	1,027.43	1,057.75	0.205486	0.211550
12/1/2041	\$10,990,000	1,057.75	-	0.211550	0.000000

(1) Subject to change in the event of certain optional redemptions or purchases of the Bonds and subject to DTC's (or other securities depository) operational procedures on the date of such mandatory sinking fund redemption.

\$47,685,000 Term Bond Due December 1, 2045

Principal Paydown Date	Mandatory Sinking Fund/Paydown Amounts(1)	Paydown Amount per \$5,000	Remaining Balance per \$5,000	Paydown Factor	Remaining Bond Factor
12/1/2042	\$11,305,000	1,185.38	3,814.62	0.237077	0.762923
12/1/2043	\$11,645,000	1,221.04	2,593.58	0.244207	0.518717
12/1/2044	\$11,995,000	1,257.73	1,335.85	0.251547	0.267170
12/1/2045	\$12,740,000	1,335.85	-	0.267170	0.000000

(1) Subject to change in the event of certain optional redemptions or purchases of the Bonds and subject to DTC's (or other securities depository) operational procedures on the date of such mandatory sinking fund redemption.

# **Notice of Redemption**

In the event a Series 2021 Bond to be redeemed is of a denomination larger than \$5,000, a portion of such Series 2021 Bond (or any integral multiple of \$5,000 in excess thereof) may be redeemed. Any Series 2021 Bond which is to be redeemed only in part may be surrendered at the principal corporate trust office of the Paying Agent and there shall be delivered to the Owner of such Series 2021 Bond a new Series 2021 Bond or Series 2021 Bonds of the same maturity and of any authorized denomination or denominations as requested by such Owner in aggregate principal amount equal to and in exchange for the unredeemed portion of the principal of the Series 2021 Bond so surrendered. All notices of redemption shall state (i) the redemption date; (ii) the redemption price; (iii) if fewer than all the Series 2021 Bonds are to be redeemed, the identifying number (and in the case of partial redemption, the respective principal amounts) and CUSIP number of the Series 2021 Bonds to be redeemed; (iv) that on the redemption date the redemption price will become due and payable on each such Series 2021 Bond and interest thereon will cease to accrue thereon from and after said date; and (v) the place where such Series 2021 Bonds are to be surrendered for payment. Official notice of such call of any of the Series 2021 Bonds for redemption shall be given by means of first-class mail, postage prepaid, by notice deposited in the United States mails not fewer than thirty (30) days prior to the redemption date addressed to the registered owner of each Series 2021 Bond to be redeemed at his address as shown on the registration books maintained by the Paying Agent.

In the case of an optional redemption, the notice may state (i) that it is conditioned upon the deposit of moneys, in an amount equal to the amount necessary to effect the redemption, with the Paying Agent no later than the redemption date, or (ii) that the Board of Liquidation retains the right to rescind such notice at any time prior to the scheduled redemption date if the Board of Liquidation delivers a certificate of an Authorized Officer to the Paying Agent instructing the Paying Agent to rescind the redemption notice (in either case, a "Conditional Redemption"), and such notice and optional redemption shall be of no effect if such moneys are not so deposited or if the notice is rescinded as described herein. The Paying Agent shall give prompt notice of such rescission to the affected Bondowners. Series 2021 Bonds subject to Conditional Redemption where redemption has been rescinded shall remain Outstanding, and the rescission shall not

constitute an Event of Default. Further, in the case of a Conditional Redemption, the failure of the Board of Liquidation to make funds available in part or in whole on or before the redemption date shall not constitute an Event of Default.

Any notice mailed or provided herein shall conclusively be presumed to have been given whether or not actually received by any Bondholder. Failure to give such notice or any defect therein shall not affect the validity of the redemption proceedings.

## Purchase of Bonds by the Board or the Board of Liquidation

The Board or the Board of Liquidation may purchase or cause to be purchased any Series 2021 Bonds of any particular maturity in lieu of redemption of such Series 2021 Bonds (in which event any Series 2021 Bonds so purchased shall be cancelled and shall cease to bear interest as provided in the General Bond Resolution). Such purchases shall be made in such manner as directed by the Board or Board of Liquidation. The Board, the Board of Liquidation or the Paying Agent shall pay the purchase price of such Series 2021 Bonds together with accrued interest thereon from such funds as may be available therefor pursuant to the General Bond Resolution, any Supplemental Resolution, or as otherwise may be made available by the Board or the Board of Liquidation.

# Provisions for Transfer, Registration and Assignment

The Series 2021 Bonds may be transferred, registered and assigned only on the registration books of the Paying Agent, and such registration shall be at the expense of the Issuer. A Series 2021 Bond may be assigned by the execution of an assignment form on such Series 2021 Bonds or by other instruments of transfer and assignment acceptable to the Paying Agent. A new Series 2021 Bond or Series 2021 Bonds will be delivered by the Paying Agent to the last assignee (the new registered owner) in exchange for such transferred and assigned Series 2021 Bonds after receipt of such Series 2021 Bonds to be transferred in proper form. Such new Series 2021 Bond or Series 2021 Bonds must be in the denomination of \$5,000 or any integral multiple in excess thereof within a single maturity. Neither the Board of Liquidation nor the Paying Agent shall be required to issue, register the transfer of, or exchange (i) any Series 2021 Bond during a period beginning at the opening of business on the 15th day of the month next preceding an Interest Payment Date and ending at the close of business on the Interest Payment Date, or (ii) any Series 2021 Bond called for redemption prior to maturity during a period beginning at the opening of business fifteen (15) days before the date of the mailing of a notice of redemption of such Series 2021 Bonds and ending on the date of such redemption.

#### Covenants of the Board

In addition to the Rate Covenant described above under "SECURITY AND SOURCES OF PAYMENT - Rate Covenant and Financial Forecast," the Board makes other covenants in the General Bond Resolution, including the following:

**Payment of Indebtedness; Limited Obligations.** The Board and the Board of Liquidation shall promptly pay or cause to be paid when due the principal of (whether at maturity, by acceleration, call for redemption or otherwise), premium, if any, and interest on the Indebtedness, including the Series 2021 Bonds, at the places, on the dates and in the manner, but only from the sources, provided in the General Bond Resolution.

*Limitations on Indebtedness.* The Board shall not issue any bonds, notes or other obligations that shall be secured by a pledge of Net Revenues (i) senior to the pledge of Net Revenues securing the Senior Debt, (ii) except in compliance with the General Bond Resolution, on a parity with the pledge of Net

Revenues securing the Senior Debt, or (iii) except in compliance with the General Bond Resolution, subordinate to the pledge of Net Revenues securing the Senior Debt.

*Operation and Maintenance*. The Board shall maintain and operate the Water System in an efficient and economical manner, shall maintain the same in good repair and sound operating condition and shall make all necessary repairs, replacements and renewals.

## Free Service, Competing Service, Billing and Enforcement Charges:

- i. The Board shall not permit connections to or use of the Water System or provide any services of the Water System without making a charge therefor in accordance with the Board's schedule of rates, fees and charges for the Water System other than those connections, use or services already in existence or as may be required by law.
- ii. The Board shall not provide, grant any franchise to provide or give consent for anyone else to provide any services which would compete with the Water System unless the Board determines that such franchise or provision of services would provide services that the Board has determined are not in its best interest to provide and would not materially impair the interests of the holders of Indebtedness.
  - iii. The Board shall bill customers for the services of the Water System on a regular basis.
- iv. If any rates, fees or other charges for the use of or for the services furnished by the Water System shall not be paid after the same shall become due and payable, the Board shall, to the extent permitted by applicable laws and regulations, disconnect the premises from the Water System or otherwise suspend service to such premises until such delinquent rates, fees or other charges and any interest, penalties or charges for reconnection of service to such delinquent customer shall have been paid in accordance with law, the policies of the Board, or a payment plan with respect to such amounts has become effective.

*Capital Budget*. The Board shall annually adopt a multi-year financial plan for capital expenses encompassing at least the forthcoming five fiscal years. (See "THE WATER SYSTEM – Capital Improvement Program.")

The General Bond Resolution also includes detailed covenants regarding: sale or encumbrance of the Water System; insurance; damage, destruction, condemnation and loss of title; records and accounts; and inspections and reports. For the full text of all the foregoing covenants and other covenants in the General Bond Resolution, see APPENDIX "F" – GENERAL BOND RESOLUTION - Particular Covenants attached hereto.

#### PURPOSE OF ISSUE

The Series 2021 Bonds are being issued in the aggregate principal amount of \$194,300,000 for the purpose of (i) refunding the Refunded Bonds; (ii) funding the applicable debt service reserve account; and (iii) paying the costs of issuance of the Series 2021 Bonds. See "SOURCES AND USES OF FUNDS" herein.

#### PLAN OF REFUNDING

A portion of the proceeds of the Series 2021 Bonds will be deposited in a special trust fund (the "Escrow Fund") established pursuant to the terms of a Defeasance and Escrow Deposit Agreement (the "Escrow Agreement") to be dated as of March 1, 2021, by and between the Issuer and U.S. Bank Global

Corporate Trust, Brandon, Mississippi, as Escrow Agent (the "Escrow Agent"). Copies of the Escrow Agreement will be available at the Municipal Securities Rulemaking Board (the "MSRB"), Washington, D.C.

The Escrow Fund will be established using a portion of the proceeds of the Series 2021 Bonds to purchase non-callable direct general obligations of the United States of America, or obligations unconditionally guaranteed in principal and interest by the United States of America, the principal of and interest on which, when added to an initial cash deposit therein, will be sufficient to pay the principal of and interest on the Refunded Bonds maturing December 1, 2021, through their maturity, and on the remaining maturities of the Refunded Bonds through their redemption on December 1, 2024 and December 1, 2025, respectively (collectively, the "Redemption Date"). Under the conditions set forth in the Escrow Agreement, replacement obligations may be substituted for the aforesaid escrow obligations.

Prior to or concurrently with the delivery of the Series 2021 Bonds, the Issuer will obtain an independent mathematical verification that the moneys and obligations required to be irrevocably deposited in trust in the Escrow Fund with the Escrow Agent, together with the earnings to accrue thereon, will always be sufficient for the payment of the principal of and interest on the Refunded Bonds through their maturity or Redemption Date, as applicable. See "VERIFICATION OF COMPUTATIONS" herein.

#### SOURCES AND USES OF FUNDS

#### **Sources and Uses of Funds**

The anticipated sources and uses of the proceeds of the Series 2021 Bonds are as follows:

SOURCES	
Bond Principal	\$ 194,300,000.00
Transfer from Prior Issue Debt Service Fund	3,016,912.50
Total	\$197,316,912.50
USES	
Deposit to Escrow Fund	\$194,480,855.13
Costs of Issuance*	2,836,057.37
Total	\$197,316,912.50

<sup>\*</sup> Includes legal and required fees, underwriters' discount, bond insurance and surety bond premiums and other issuance costs.

## SECURITY AND SOURCE OF PAYMENT

The Series 2021 Bonds are special and limited obligations of the City and are authorized by Part III of Chapter 9 of Title 33 and Part XIV, Chapter 4 of Title 39, of the Louisiana Revised Statutes of 1950, as amended (the "Act") and other statutory and constitutional authority, and the Bond Resolution. The City issued its Water Revenue and Refunding Bonds, Series 2014 (the "Series 2014 Bonds") on July 2, 2014, pursuant to the General Bond Resolution and the First Supplemental Water Revenue Bond Resolution adopted by the Board on May 21, 2014. The City issued its Water Bonds, Series 2015 (the "Series 2015 Bonds" on December 17, 2015, pursuant to the General Bond Resolution, the First Supplemental Resolution and the Second Supplemental Water Revenue Bond Resolution adopted by the Board on October 21, 2015. The Series 2021 Bonds are being issued on a parity with the unrefunded portions of the Series 2014 Bonds and the Series 2015 Bonds (the "Outstanding Parity Bonds").

As of January 27, 2021, \$92,270,000 of the Series 2014 Bonds and \$97,630,000 of the Series 2015 Bonds will be outstanding.

The General Bond Resolution also permits Other Senior Parity Indebtedness to be secured on a parity with Series 2021 Bonds and the Outstanding Parity Bonds, and permits Subordinate Debt to be secured on a basis subordinate to the Series 2021 Bonds and the Outstanding Parity Bonds. The Series 2021 Bonds, the Outstanding Parity Bonds, and any Other Senior Parity Indebtedness are collectively referred to herein as the "Bonds."

## **Pledge of Net Revenues**

The Series 2021 Bonds are payable solely from and secured, on a parity with the Outstanding Parity Bonds, by the Net Revenues and certain funds and accounts held under the General Bond Resolution. As defined in the General Bond Resolution, "Net Revenues" means, for any period of computation, Revenues less Operating Expenses for that period. For the General Bond Resolution's definitions of "Revenues" and "Operating Expenses," see APPENDIX "F" - GENERAL BOND RESOLUTION - Definitions attached hereto.

The Series 2021 Bonds do not constitute a general obligation of the City, and neither the credit nor the taxing power of the City is pledged to the payment thereof, or any part thereof, or to the payment of any interest thereon. The revenues of the Sewerage System and the Drainage System are not pledged as security for the payment of the Series 2021 Bonds.

## **Special Funds and Application of Revenues**

The General Bond Resolution establishes the following Funds and Accounts to be held by the Board of Liquidation (each such Fund or Account is subject to the lien of the Bond Resolution):

- a. Debt Service Fund, in which there shall be established an Interest Account, a Principal Account and a Sinking Fund Account, and a separate subaccount in each Account with respect to (i) all Series of Common Debt Service Reserve Secured Bonds (the Series 2021 Bonds and the Outstanding Parity Bonds are and are referred to herein as "Common Debt Service Reserve Secured Bonds"), (ii) each Series of Separately Secured Debt Service Reserve Fund Bonds and (iii) each incurrence of Senior Parity Indebtedness;
- b. Debt Service Reserve Fund, in which there shall be established (i) a Series Debt Service Reserve Account for all Series of Common Debt Service Reserve Secured Bonds, and (ii) as applicable, a Series Debt Service Reserve Account for each Series of Bonds that has a Separate Series Debt Service Reserve Requirement;
  - c. Subordinate Debt Service Fund;
  - d. Subordinate Debt Service Reserve Fund;
  - e. Redemption Fund; and
  - f. Construction Fund.

In addition, the General Bond Resolution establishes the following Funds to be held by the Board (unless otherwise noted, each such Fund is subject to the lien of the Bond Resolution):

- (i) Revenue Fund;
- (ii) Operating Fund (not subject to the lien of the Bond Resolution);
- (iii) Operating Reserve Fund;
- (iv) Rate Stabilization Fund; and
- (v) Water System Fund.

Pursuant to the General Bond Resolution, all Revenues shall be deposited in the Revenue Fund to be held by the Board; provided, however, that upon an Event of Default, the Board will transfer all amounts in all Board-held funds (other than the Operating Fund) to the Board of Liquidation, and the Board of Liquidation shall hold such moneys in trust for the Holders.

No later than the 20th day of each month, the Board shall transfer from the Revenue Fund to the Operating Fund an amount sufficient to pay Operating Expenses incurred during such month. Thereafter, Net Revenues shall be disbursed no later than the 20th day of each month in the following order (except that no distinction or preference shall exist in making the required deposits of Net Revenues in the Interest Account, the Principal Account or the Sinking Fund Account of the Debt Service Fund, such accounts being on a parity with each other as to payment from Net Revenues):

- i. To the subaccounts in the Interest Account of the Debt Service Fund for each Series of Bonds, an amount equal to 1/6 of the amount falling due on the next interest payment date for such Series of Bonds.
- ii. To the subaccounts of the Principal Account of the Debt Service Fund for each Series of Bonds, an amount equal to 1/12 of the amount falling due on the next principal payment date or sinking fund redemption date, or such other proportionate amount as shall be necessary to ensure monthly deposits for the payment in full of principal when due with respect to each Series of Bonds.
- iii. To the applicable Account of the Debt Service Reserve Fund for each Series of Bonds the amounts, if any, necessary to restore the amount of deposit therein to the related Series Debt Service Reserve Requirement or reimburse the provider of any Credit Facility deposited in the Debt Service Reserve Fund.
- iv. To the Subordinate Debt Service Fund with respect to each Subordinate Debt issue, the amounts equal to the deposits to such Funds and Accounts therein required by the related Supplemental Resolution or other documents evidencing such debt.
- v. To the Subordinate Debt Service Reserve Fund with respect to each Subordinate Debt issue the amounts, if any, necessary to restore the amount on deposit therein to the related Subordinate Debt Debt Service Reserve Requirement.
- vi. To the Operating Reserve Fund, the amounts, if any, necessary to restore the amounts on deposit therein to the Operating Reserve Requirement, which requirement shall be funded within 24 months of any withdrawal and replenished by depositing 1/24 of the Operating Reserve Requirement on the last Business Day of each month after such withdrawal, as necessary.
- vii. To the Water System Fund, any moneys remaining in the Revenue Fund after the transfers required by (i) through (vi) above have been made. To the extent that moneys in the Debt Service Fund are insufficient to make the required principal and interest payments on Senior Debt, then moneys in the Water System Fund, the Operating Reserve Fund, the Subordinate Debt Service Fund, any Subordinate Debt Service Reserve Fund, and the Debt Service Reserve Fund, in that order, shall be used to cure any such

deficiencies. If not needed to cure any deficiencies, moneys in the Water System Fund may be used for any authorized purpose. Notwithstanding the foregoing, moneys on deposit in the Water System Fund shall be used:

- a. on January 15 and July 15 of each year, to pay an amount to the Board of Liquidation necessary to make principal and interest payments related to CEA GO Zone Indebtedness; and
  - b. to make required Department of Public Works Payments, when due.

For more information regarding the General Bond Resolution's treatment of each of the above Funds (and, if applicable, the accounts therein), the required deposits to the Funds, and the required or permitted use of the moneys in the Funds, see APPENDIX "F" - GENERAL BOND RESOLUTION - Revenues and Funds attached hereto.

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

The General Bond Resolution establishes a Debt Service Reserve Fund that is held by the Board of Liquidation. The Series 2021 Bonds will constitute Common Debt Service Reserve Secured Bonds under the General Bond Resolution. As a result of that designation, the payment of principal of and interest on the Series 2021 Bonds is further secured, together with the other Common Debt Service Reserve Secured Bonds and any Additional Bonds that are also Common Debt Service Reserve Secured Bonds, by a Series Debt Service Reserve Account in the Debt Service Reserve Fund required to be funded at the Common Debt Service Reserve Requirement (the "Common Debt Service Reserve Requirement"), which is the least of (i) 10% of the aggregate original stated principal amount of all Common Debt Service Reserve Secured Bonds (provided that if any Common Debt Service Reserve Secured Bonds have more than a *de minimis* (2%) amount of original issue discount or premium, the issue price of such Common Debt Service Reserve Secured Bonds (net of pre-issuance accrued interest) is used to measure the 10% limitation in lieu of its stated principal amount), (ii) the maximum amount of aggregate Annual Debt Service on all Common Debt Service Reserve Secured Bonds in any Fiscal Year, or (iii) 125% of average aggregate Annual Debt Service on all Common Debt Service Reserve Secured Bonds.

The Board of Liquidation expects that, upon the delivery of the Series 2021 Bonds, the Series Debt Service Reserve Account for the Common Debt Service Reserve Secured Bonds will be funded to the Common Debt Service Reserve Requirement with a combination of cash on deposit and a Municipal Bond Debt Service Reserve Insurance Policy (the "Reserve Policy") provided by Assured Guaranty Municipal Corp. ("AGM"). The Reserve Policy provides that after all cash and securities held in the Series Debt Service Reserve Account for the Common Debt Service Reserve Secured Bonds are depleted, AGM will transfer funds up to the policy limit as may be necessary to prevent a payment default on the Common Debt Service Reserve Secured Bonds. The policy limit on the Reserve Policy is \$7,521,798.60.

The Supplemental Resolution for any Series of Additional Bonds may designate those Bonds as either Common Debt Service Reserve Secured Bonds or as Separate Series Debt Service Reserve Secured Bonds with a Separate Series Debt Service Reserve Requirement. The holders of Separate Series Debt Service Reserve Secured Bonds will have no right to or claim on the Series Debt Service Reserve Account for the Common Debt Service Reserve Secured Bonds. Cash may be withdrawn from and additional credit facilities may be deposited in the Series Debt Service Reserve Account for the Common Debt Service Reserve Secured Bonds in accordance with the General Bond Resolution.

#### **Rate Covenant and Financial Forecast**

The General Bond Resolution includes the Board's Rate Covenant, pursuant to which the Board is obligated to fix, charge, collect and revise rates, fees and other charges for the use of, and the services furnished by, the Water System sufficient to cause Rate Covenant Net Revenues (i.e., Net Revenues inclusive of transfers from the Rate Stabilization Fund to the Revenue Fund, but exclusive of transfers to the Rate Stabilization Fund from the Revenue Fund) to meet the following three independent requirements of the General Bond Resolution:

- Rate Covenant Net Revenues shall be sufficient in each Fiscal Year (the "Tested Fiscal Year") to pay (i) the amount required to pay Annual Debt Service on Senior Debt in such Fiscal Year, (ii) any amount necessary to be deposited in any Series Debt Service Reserve Account to restore the amount on deposit therein to the applicable Series Debt Service Reserve Requirement, (iii) the amount required to pay Annual Debt Service on Subordinate Debt in such Fiscal Year (including reserves in connection therewith and the required restoration thereof), (iv) any amount necessary to be deposited in the Operating Reserve Fund to maintain the required balances therein and (v) all other amounts which the Board may by law or contract be obligated to pay.
- Rate Covenant Net Revenues shall be sufficient in each Fiscal Year to be at least equal to each of the following: (i) 125% of the Annual Debt Service with respect to Senior Debt for such Fiscal Year; and (ii) 110% of the aggregate Annual Debt Service with respect to Senior Debt and Subordinate Debt for such Fiscal Year.
- Rate Covenant Net Revenues excluding transfers from the Rate Stabilization Fund to the Revenue Fund (as provided in the General Bond Resolution) and the proceeds of Grants shall at least equal 100% of Annual Debt Service on Senior Debt and Subordinate Debt for such Fiscal Year.

In the event a failure by the Board to meet the Rate Covenant becomes an Event of Default, the Board of Liquidation is empowered by statute to compel the application of such rates and charges by appropriate judicial proceedings. For more detailed description of the Rate Covenant and of the consequences of the Board's failure to meet the Rate Covenant for any fiscal year, see APPENDIX "F" - GENERAL BOND RESOLUTION - Revenues and Funds attached hereto.

Financial information, including projections and projected debt service coverage levels, are included in "ESTIMATED DEBT SERVICE REQUIREMENTS" and "WATER SERVICE CHARGES AND CUSTOMER BASE" herein.

#### **Additional Bonds and Other Parity Senior Indebtedness**

Additional Bonds may be issued from time to time for the benefit of the Water System. Any Additional Bonds shall be issued pursuant to the terms of the General Bond Resolution, and as authorized by a Supplemental Resolution. Before the issuance and authentication of any such Additional Bonds, the General Bond Resolution requires the Board to deliver various documents to the Board of Liquidation, including a certificate of (i) a Qualified Independent Consultant, stating that based on the Board's financial records for a Test Period, the Board would have been able to meet the Rate Covenant, taking into account (a) the maximum Annual Debt Service on the proposed Series of Additional Bonds in the current or any future Fiscal Year, (b) the Additional Net Revenues from the rates, fees and other charges adjusted to reflect any rate increases that had not been in effect throughout the Test Period but that have been approved by the Board, the Board of Liquidation, and the City at the time of the delivery of the proposed Series of Additional Bonds to go into effect within the following five years; and (c) additional Net Revenues that the Board may

realize from the addition to the Water System of the assets it proposes to finance through the issuance of the proposed Series of Additional Bonds or other funding sources within the following five years, or (ii) an Authorized Officer of the Board stating that, based on the Board's financial records for a Test Period, the Board would have been able to meet the Rate Covenant, taking into account the maximum annual Debt Service on the proposed Series of Additional Bonds in the current or any future Fiscal Year. In making such certifications, the Authorized Officer of the Board or the Qualified Independent Consultant shall determine and utilize the Additional Indebtedness Test Net Revenues in place of the Rate Covenant Net Revenues in determining whether the Board would have been able to meet the Rate Covenant.

As part of the Board's Capital Improvement Program (as defined herein), the Board anticipates the issuance of Additional Bonds. For a discussion of the Capital Improvement Program and the sources from which the Board anticipates funding costs of the Capital Improvement Program, see "THE WATER SYSTEM—Capital Improvement Program" herein.

For a more detailed description of the General Bond Resolution's requirements and conditions for the issuance of Additional Bonds and for the issuance or incurrence of Other Senior Parity Indebtedness or Subordinate Debt, see APPENDIX "F" - GENERAL BOND RESOLUTION - Issuance of Bonds - Conditions for Issuing Bonds attached hereto.

# **Security Interest**

The Board in the Bond Resolution pledges the Net Revenues and certain funds and accounts held under the General Bond Resolution as security for the Series 2021 Bonds. See "SECURITY AND SOURCE OF PAYMENT - Pledge of Revenues" herein. Pursuant to Section 39:1430.1 of the Louisiana Revised Statutes of 1950, as amended, the Net Revenues so pledged and then or thereafter received by the Board, the Board of Liquidation, the Issuer or the Paying Agent (hereinafter defined) shall be subject to the lien of such pledge. The lien of the Bondholders on the Net Revenues is a first priority lien, and no filing is required under Chapter 9 of the Uniform Commercial Code as enacted in the State.

# **DEBT SERVICE REQUIREMENTS**

The Financial Feasibility Report (See APPENDIX "E" attached hereto) utilizes the actual debt service requirements on the Series 2021 Bonds. To complete the capital program as presently contemplated, future authorizations for additional Indebtedness are required. The projections assume water rate increases as detailed in "Exhibit 15" of APPENDIX "E" attached hereto.

The debt service requirements on the Outstanding Parity Bonds and the Series 2021 Bonds are shown in the following charts:

	Projected Year Ending December 31,				
	2021	2022	2023	2024	2025
Senior Debt Service:					
Series 2014	\$642,250	\$3,867,250	\$2,711,000	\$2,714,500	\$2,712,250
Series 2015	761,350	1,731,350	2,887,250	2,884,500	2,886,500
Proposed Series 2021	3,452,818	7,138,114	7,142,739	7,141,045	7,139,910
Total Senior Debt Service	\$4,856,418	\$12,736,714	\$12,740,989	\$12,740,045	\$12,738,660
Other Debt Service:					
Proposed Future LDH SRF Loans [1]	\$0	\$556,700	\$1,113,400	\$1,670,100	\$2,226,800
Total Other Debt Service	\$0	\$556,700	\$1,113,400	\$1,670,100	\$2,226,800
Total Debt Service	\$4,856,418	\$13,293,414	\$13,854,389	\$14,410,145	\$14,965,460

<sup>[1]</sup> Debt service assumes \$10 million per year new SRF loans, starting in 2021 with repayment beginning the year after issuance (e.g., the first SRF loan in 2021 begin debt service in 2022). Debt amortization is assumed over a 20 year period, 1.0% interest rate with one year capitalized interest

Source: Raftelis Financial Consultants, Inc.

Series 2021 Bonds and Outstanding Parity Bonds

Series 2021 Bonds **Outstanding Fiscal Year Parity Debt Total System** Service **Ending Principal Interest Debt Service Debt Service** 0.00 4,856,418 12/31/2021 1,403,600 3,452,818 3,452,818 12/31/2022 5,598,600 2,500,000 4,638,114 7,138,114 12,736,714 12/31/2023 5,598,250 2,515,000 4,627,739 7,142,739 12,740,989 12/31/2024 5,599,000 2,525,000 4,616,045 7,141,045 12,740,045 12/31/2025 5,598,750 2,540,000 4,599,910 7,139,910 12,738,660 12/31/2026 5,597,000 2,565,000 4,578,117 7,143,117 12,740,117 12/31/2027 2,883,250 5,300,000 4,552,261 9,852,261 12,735,511 12/31/2028 2,887,500 5,370,000 4,485,534 9,855,534 12,743,034 12/31/2029 8,330,000 4,407,186 12,737,186 12,737,186 12/31/2030 8,475,000 4,266,326 12,741,326 12,741,326 12/31/2031 8,630,000 4,110,301 12,740,301 12,740,301 12/31/2032 8,800,000 3,942,793 12,742,793 12,742,793 12/31/2033 8,980,000 3,763,185 12,743,185 12,743,185 12/31/2034 9,170,000 3,570,923 12,740,923 12,740,923 12/31/2035 9,375,000 3,365,423 12,740,423 12,740,423 12/31/2036 9,590,000 3,150,642 12,740,642 12,740,642 12/31/2037 9,810,000 2,926,140 12,736,140 12,736,140 12/31/2038 10,095,000 2,642,729 12,737,729 12,737,729 12/31/2039 10,380,000 2,351,085 12,731,085 12,731,085 12/31/2040 10,675,000 2,051,207 12,726,207 12,726,207 12/31/2041 10,990,000 1,742,806 12,732,806 12,732,806 12/31/2042 11,305,000 1,425,305 12,730,305 12,730,305 12/31/2043 11,645,000 1,087,398 12,732,398 12,732,398 12/31/2044 11,995,000 739,329 12,734,329 12,734,329 12/31/2045 12,740,000 380,799 13,120,799 13,120,799

## **BOARD OF LIQUIDATION, CITY DEBT**

The Board of Liquidation was created by the Louisiana Legislature in 1880 and made a "body corporate," separate and distinct from the City, in 1890. The Series 2021 Bonds are being sold through the Board of Liquidation, which also approves their issuance.

The Board is required to pay to the Board of Liquidation monthly from revenues of the Water System amounts not less than one-twelfth of the annual payment of principal and interest on the Series 2021 Bonds, the Outstanding Parity Bonds, and any additional bonds payable from the revenues of the Water System, and amounts required to be deposited to the Reserve Fund. The Board of Liquidation is empowered to compel, by appropriate judicial proceedings, the Board to fix water rates which will produce net revenues sufficient to pay such debt service and to fund such reserve fund.

The Board of Liquidation is composed of nine members: the Mayor and the two City Councilmembers-at-large, who serve ex officio, and six members, referred to as the "syndicate" members, appointed in the manner hereinafter described. The syndicate members have traditionally been selected from leaders of the business, financial and professional community of New Orleans. All members of the Board of Liquidation serve without pay. Further information about the Board of Liquidation, its membership and financial data, including certain Board information, may be found on its website at <a href="http://www.bolcd.com">http://www.bolcd.com</a>.

The incumbent members of the Board of Liquidation, who serve until their successors are appointed, their terms of office, and their principal occupations are:

LaToya Cantrell, ex officio

Mayor, City of New Orleans (Term: 5/07/2018-5/02/2022)

Helena N. Moreno, ex officio

Councilmember-at-large, City of New Orleans

(Term: 5/07/2018-5/02/2022)

**Donna Glapion,** ex officio

Councilmember-at-large, City of New Orleans (Term: 01/29/2021- 12/31/2021)

Mary K. Zervigon, President

Attorney, Former Chairman of the Louisiana Tax Commission

(Term: 2/20/2014-12/31/2025)

Henry F. O'Connor, Jr., Vice President

Attorney

(Term: 11/01/2012-12/31/2023)

Ralph W. Johnson

Chief Financial Officer, Dillard University (Term: 6/09/2016-12/31/2021)

Julius E. Kimbrough, Jr

Executive Director, Crescent City Community Land Trust (Term: 6/21/2018-12/31/2029)

Todd O. McDonald

Vice President, Liberty Bank (Term: 5/7/2020-12/31/2031)

Lynes R. Sloss

Executive

(Term: 11/16/2017-12/31/2027)

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

The Board was created by Act 6 of the Louisiana Legislature of 1899 as a special board, independent of the City government to construct, maintain and operate the Water System and the Sewerage System for the City. In 1903, the Legislature gave the Board control of and responsibility for the Drainage System. As affirmed by the decision of the Louisiana Supreme Court in *Roberts v. Sewerage and Water Board*, 634 So.2d 341 (La. 1994), the Board is "an autonomous or self-governing legal entity with respect to the management of its business or function of providing water, sewerage and drainage service to customers in Orleans and other parishes." As such, the Board is legally independent of the City of New Orleans, which has no control over the administration of its activities and finances, except the approval of the City Council and the Board of Liquidation in the case of bond issues and certain rate increases.

#### **Board of Directors**

The Board is composed of eleven members, which includes the Mayor, the chair of the Public Works, Sanitation and Environment Committee of the New Orleans City Council or his designee, two representatives of the Board of Liquidation, and seven citizen members, of which five represent council districts, two are consumer advocates. One of the seven citizen members appointed to the Board is required to be a retired civil engineer. Citizen members are appointed by the Mayor with the advice and consent of the City Council from a list of nominees submitted by a Selection Committee comprised of representatives from the following organizations: Dillard University, Loyola University, Tulane University, Xavier University, Delgado Community College, University of New Orleans, Southern University at New Orleans, New Orleans Chamber of Commerce, New Orleans Regional Black Chamber of Commerce, and the Urban League of Greater New Orleans. Citizen members are required to be registered voters in Orleans Parish, shall have been a domiciliary of Orleans Parish for two years previous to their appointment, shall have experience in either architecture, environmental quality, finance, accounting, business administration, engineering, law, public health, urban planning, facilities management, public administration, science, construction, business management, community or consumer advocacy, or other pertinent disciplines, and their appointment shall reflect the gender and racial diversity of our city. Two citizen members shall be consumer advocates with community advocacy or consumer protection experience or experience in a related field. Members will serve staggered initial terms and will serve no more than two consecutive fouryear terms thereafter. The term of office for members appointed to the Sewerage and Water Board of New Orleans is four years and a member shall serve no more than two consecutive terms of office. All members serve without pay.

The Mayor is the ex-officio President of the Board and one of the citizen members is elected by the Board to serve as president pro tempore in the absence of the Mayor. The members of the Board are:

LaToya Cantrell, President, Mayor
Jay H. Banks, City Councilmember, District B
Robin Barnes, Resilience Resolutions
Tamika Duplessis, President Pro Tem, Ph.D, Delgado Community College
Alejandra Guzman, Consumer/Community Advocate, New Orleans Business Alliance
Janet Howard, Past President, Bureau for Governmental Research
Ralph Johnson, Board of Liquidation Syndicated Member, Dillard University
Joseph Peychaud, Consumer/Community Advocate, St. Katharine Drexel Prep
Lynes R. Sloss, Board of Liquidation Syndicated Member, Bellwether Technology
Maurice G. Sholas, M.D., Ph.D., Sholas Medical Consulting

## **Organizational Structure**

The Board appoints and fixes the salaries of the Executive Director, General Superintendent, and Special Counsel, who each hold office at the pleasure of the Board. The Executive Director exercises general administrative functions and managerial authority over the operations and activities of the Board, including the accounting, budgeting, information systems, customer service, personnel, purchasing, risk management, internal audit, administrative services, and support services departments. The Chief of Staff assists and advises the Executive Director. The General Superintendent is responsible for the engineering, operations, facility maintenance, networks, environmental affairs and plumbing departments. The Deputy General Superintendent assists the General Superintendent. The Special Counsel manages the legal department and provides legal advice to the Board.

Brief biographies of the Executive Director, Chief of Staff, General Superintendent, and Chief Financial Officer follow:

Ghassan Korban, Executive Director (2018 to present). Ghassan Korban joined the Board in September 2018 and brings over 30 years of public service experience. Prior to joining the Board, he served as the Commissioner of the Department of Public Works for the City of Milwaukee. He spent his first 20 years with the City in the Infrastructure Services Construction Section as Project Engineer, Testing Laboratory Manager Assistant, Construction Supervisor, District Manager, and Chief Construction Engineer. During his tenure, he managed a \$60 million construction budget. He was also responsible for one of two Design and Construction Districts in the City of Milwaukee, managing a staff of 50 engineers, technicians, and administrative staff.

Christy Harowski, Chief of Staff (2019 to present). Christy Harowski is the Chief of Staff of the Board. As a member of the Board's executive team, she focuses on policy execution, government relations, strategic planning, and special projects. Prior to joining the Board, Ms. Harowski was Director of Special Projects for the Business Council of New Orleans, where she focused on government-related public policy development and advocacy. Before shifting to policy work, Ms. Harowski practiced law for ten years, first privately at the Barrasso Usdin law firm and then as a member of the City's legal department. While at the City, she handled high-profile litigation and policy matters, including a variety of constitutional and zoning disputes. Ms. Harowski graduated from the University of Florida with a B.S. in Journalism and received her J.D., magna cum laude, from Tulane University.

Robert Turner, General Superintendent (2019 to present). Robert Turner is a registered professional Civil Engineer with more than 35 years of experience managing public works projects. Before serving the Board, Mr. Turner served as the Director of Engineering for the Flood Protection Authority – East. He has an extensive background in flood protection and public works, including serving as the Executive Director of the Lake Borgne Basin Levee District and as the Director of Public Works for St. Bernard Parish. Additionally, he served as the Louisiana State representative on the National Committee on Levee Safety and as a member of the Board of Directors of the National Association of Flood and Stormwater Management Agencies. Mr. Turner's work as a member of the interim emergency management team created in response to the August 2017 flood made him the ideal choice to be the Sewerage and Water Board's newest General Superintendent of Operations. He accepted the position in January 2019.

**E. Grey Lewis, Chief Financial Officer** (2020 to present). Grey Lewis is the Chief Financial Officer of the Board having joined in November 2020. As a member of the Board's executive team, he focuses on finance, accounting, budgeting and other related departments. Prior to joining the Board, Mr. Lewis was an Audit Director with the New Orleans office of Ernst & Young having served in this capacity since 2013 and has over 20 years of experience in public accounting. Mr. Lewis graduated from Trinity

University in San Antonio, Texas, with a M.S. in Accounting and B.S. in Accounting and Finance and is a certified public accountant in Louisiana and Texas.

## **Employees and Labor Relations**

The total number of authorized positions for the Board for Fiscal Years 2019 and 2020 were 1,586 and 1,584, respectively. The total number of authorized positions for the Board for Fiscal Year 2021 has been reduced to 1,320. In Fiscal Year 2019, the Board had 1,483 full time employees. As of January 21, 2021, the Board has approximately 1,271 full-time employees. The New Orleans Civil Service Commission established the employment policies for classified Board employees.

A number of vacancies exist in several of the Board's departments, especially in those departments that require highly educated and skilled personnel. Immediately following Hurricane Katrina, the City Council suspended the Domicile Policy (which requires Board employees to be domiciled within the City of New Orleans) to aid the Board's efforts to fill open positions. The City Council, however, reinstated the Domicile Policy effective January 1, 2013. In the aftermath of the City Council's action to reinstate the Domicile Policy, hiring of certain technical-level positions at the Board has slowed. In an effort to curtail the effect of the reinstated Domicile Policy, the Board actively recruits at local college and university campuses, job fairs, and trade schools.

A significant portion of the Board's leadership and employees are currently eligible to retire or will be within the next five years. Recognizing the importance of maintaining appropriate staffing levels and maintaining and promoting institutional knowledge, the 2020 budget includes 133 additional positions to increase staffing levels and allow for succession planning and knowledge transfer. See APPENDIX "D" - Consulting Engineer's Report attached hereto.

## Retirement/Pension Plan; Other Postemployment Benefits ("OPEB") Liability

The Pension Trust Fund (the "Pension Trust Fund"), established by the Board pursuant to Section 11:3821 of the Louisiana Revised Statutes of 1950, as amended, administers a defined benefit pension plan for all qualifying full-time employees of the Board. The Board maintains exclusive control over the pension plan through the Pension Committee of the Pension Trust Fund. The pension plan provides retirement, death, and disability benefits to recipients. Such benefits vest, at a minimum level, after ten years of service with the Board, and incrementally increase with each year of service beyond ten years. Employees are eligible to retire and begin receiving benefits at age 65. Annual benefits paid to retirees are adjusted based on a cost-of-living adjustment based on the increase in the Consumer Price Index for all urban wage earners published by the U.S. Department of Labor; provided, however such adjustment may not exceed 2% on the first \$10,000 of initial retirement benefits paid out to a retiree.

Plan information as of December 31, 2020, is not yet available.

**Plan Assets and Net Position.** The total plan assets and net position of the Pension Trust Fund as of December 31, 2019 were approximately \$240.9 million and \$239.7 million, respectively, representing a 10.9% and 11.3% increase, respectively, from December 31, 2018. Plan net position increased by approximately \$24.4 million in 2019 primarily due to net appreciation in fair value of investments by approximately \$32.7 million. An increase of employee and employer contributions of \$2.4 million was offset by an increase of benefit payments of approximately \$1.9 million in 2019.

*Change in Net Position*. The Pension Trust Fund's change in net position increased by \$44.4 million mainly attributable to a \$41.5 million net investment (loss) income change. The increase in net

investment income in 2019 is due to stock market performance causing appreciation in fair value of the equity investments that account for approximately half of the investment portfolio of the pension trust fund.

*Plan Contributions*. The actuary determined contribution requirement for the Board was 21.328% and 20.170% for 2019 and 2018. The contribution requirement for employees for the years ended December 31, 2019 and 2018 was 6.0%. The actual Board's and employees' contributions (including contributions for transferred employees from other pension plans) for the years ended December 31 were as follows:

	<u>2019</u>	<u>2018</u>
Employer	\$ 10,466,009	\$ 8,419,441
Employee	<u>2,793,158</u>	2,535,027
Total contributions	\$ 13,259,167	\$ 10,954,468

Summary and Sensitivity of Net Pension Liability. The following chart presents the net pension liability of the Board as of December 31, 2019, calculated using the Pension Trust Fund discount rate of 7%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6%) or 1-percentage-point higher (8%) than the current rate:

	1% Decrease	Current Discount Rate	1% Increase
	(6%)	(7%)	(8%)
<b>Total Pension Liability</b>	\$377,953,504	\$344,719,120	\$316,532,054
Fiduciary Net Position	239,677,702	239,677,702	239,677,702
Net Pension Liability	138,275,802	105,041,418	76,854,352

For more information regarding the Board's pension and OPEB obligations as of December 31, 2019, see APPENDIX "C" - Comprehensive Annual Financial Report of the Sewerage and Water Board attached hereto.

# **Risk Management and Insurance**

The Board operates a Risk Management Department with these responsibilities:

- i. Administration and claims handling functions for the Board's self-insured Workers' Compensation Benefit Fund;
- ii. Administration and claims handling function of the Board's self-insured general liability program;
- iii. Safety inspections, accident review, and safety training for the Board employees;
- iv. Administration and claims handling functions under the Board's \$350,000 self-insured retention for their auto liability claims, in conjunction with the Board's designated independent claims service; and
- v. Enterprise Risk Management throughout the Board, including the identification and recommendation of insurance to be purchased or renewed.

The Board maintains various insurance policies in the amounts required by the General Bond Resolution.

#### THE WATER SYSTEM

## General

Established in 1899, the Water System provides water to the City's residents, businesses, and governmental entities. The Water System draws its water supply from the Mississippi River though its four river supply intake systems. The Water System is comprised of two distinct systems which are located on the east and west banks of the Mississippi River (the "East Bank System" and the "West Bank System," respectively), and, in addition to four river supply intakes, contains two treatment plants (the "Carrollton WTP" and "Algiers WTP," respectively), storage facilities, and two independent distribution networks.

The Water System serves approximately 383,000 people. The System's current raw water pumping capacity is approximately 365 million gallons per day ("MGD") (310 MGD at the Carrollton WTP and 55 MGD at the Algiers WTP). The System's current water treatment capacity is approximately 234 MGD (210 MGD at the Carrollton WTP and 24 MGD at the Algiers WTP), and the total water treatment flow of the System averaged approximately 143.4 MGD (133 MGD at the Carrollton WTP and 10.4 MGD at the Algiers WTP). See "THE WATER SYSTEM - Water Treatment Plants" herein. The Water System also maintains water storage capacity of 45.8 million gallons ("MG") (35.8 MG at the Carrollton WTP and 10 MG at the Algiers WTP). Once treated, the System's water is delivered to customers via the System's approximately 1,812-mile-long water main network that contains more than 128,936 service connections. See "THE WATER SYSTEM - Distribution System" herein.

# **Water Pumping and Power**

The Water System utilizes four separate intake structures to provide the Water System with the raw water necessary to meet Water System demands. Together the New River Station and the Old River Station provide for the raw water needs of the Carrollton Plant, although either station alone can meet the normal daily demands of the treatment plant. The Algiers WTP is served by River Station No. 1 and River Station No. 2.

The Board also operates the power plant needed to bring raw water to the Carrollton WTP and the Algiers WTP and pump the treated water from each WTP to the distribution system. The power plant is located at the Carrollton WTP and is currently undergoing a series of improvements to the turbines and boilers funded by the Federal Emergency Management Agency ("FEMA"). The Corps of Engineers is also completing storm-proofing improvements to the power plant. See APPENDIX "D" - Consulting Engineer's Report attached hereto. The primary power source for the Carrollton WTP is local energy provider Entergy; however, the power plant can also support the Carrollton WTP in addition to the demand from the drainage and Sewerage Systems during an emergency. The Water System also operates a small emergency power-generation station at the Algiers WTP that is capable of generating enough power to support operations at the Algiers WTP.

# **Water Treatment Plants**

The following provides a description of the Water System's treatment plants, each of which, in the view of the Board, has adequate capacity to serve its geographic area, and, together, have adequate capacity to serve the entire Water System. See APPENDIX "D" - Consulting Engineer's Report attached hereto.

*Carrollton WTP*. All water for the East Bank System is treated at the Carrollton WTP. The Carrollton WTP was placed into service in 1905 and is located near the boundary separating Orleans Parish and Jefferson Parish. Raw water is pumped to the Carrollton WTP by the New River Station and the Old River Station. Once treated, the Carrollton WTP's water is sent to the distribution system via the Claiborne

pumping station and the steam driven pumps at the power station building or the Panola pumping station. The Carrollton WTP is the larger of the System's two water treatment plants, and pumps approximately 135 MGD, nearly 65% of its 210 MGD capacity.

Fiscal Year	Daily Output (MGD)			
	Average	Maximum		
2014	132.6	157.3		
2015	130.5	144.7		
2016	131.6	213.8		
2017	138.9	149.2		
2018	138.6	168.7		
2019	137.0	163.0		

Source: Black & Veatch

*Algiers WTP*. All water for the West Bank System is treated at the Algiers WTP. The Algiers WTP was also placed into service in the early 1900s and serves as the primary distribution point for the West Bank System. Raw water is brought to the Algiers WTP by two dedicated raw water pumping stations. Once treated, the Algiers WTP's water is sent to the distribution network via two high lift pumping stations. The Algiers WTP pumps approximately 9.85 MGD, 41.04% of its 24 MGD capacity.

Fiscal Year	Daily Output (MGD)			
	Average	Maximum		
2014	10.4	15.6		
2015	10.1	13.9		
2016	9.7	17.3		
2017	10.3	14.0		
2018	9.4	13.5		
2019	9.2	13.7		

Source: Black & Veatch

# **Distribution System**

The Water System's distribution network contains over 1,800 miles of mains ranging from one to 54 inches in diameter, 30,316 valves, and 23,264 hydrants. The Water System maintains a water storage facility at each water treatment plant and is able to store approximately 35.8 MG at the Carrollton WTP and 10 MG at the Algiers WTP. For a discussion of the "non-revenue" water of the Board, see "INVESTMENT CONSIDERATIONS - Future Financial Performance - Ability to Finance Future Projects; Rate Increases" herein.

# **Governmental Regulation - Federal**

**Drinking Water**. The Water System is subject to the requirements of the Safe Drinking Water Act of 1974, as amended in 1986 and 1996 by Congress. The 1986 amendments to the Safe Drinking Water Act extended the regulatory agenda of the United States Environmental Protection Agency ("EPA") to include, among other things, the development of drinking water standards for 83 contaminants, filtration performance standards, and the prohibition of materials in distribution systems and home plumbing that contain lead.

*NPDES Permit and Water Treatment System Sediments*. The Clean Water Act requires that every discharger of pollutants into navigable waters acquire a National Pollution Discharge Elimination System ("NPDES") permit from the EPA, or from a state or interstate agency delegated permit program responsibility by the EPA. NPDES permits control the type and quantity of discharge which will be allowed while the discharger is moving toward compliance with the two-step clean-up schedule. The Water System holds LPDES Permits for the discharge of water treatment plant residuals for both the Carrollton (LA0000086) and Algiers (LA0061191) plants.

Lead Levels. Pursuant to the Safe Drinking Water Act, the Lead and Copper Rule (the "Lead and Copper Rule") was promulgated by the EPA in 1991. The Lead and Copper Rule establishes maximum contaminant level goals and action levels for lead and copper. If more than 10% of the tap water samples contain lead above the action level of 15 micrograms per liter or copper above 1.3 milligrams per liter, the Water System is required to perform public education and to optimize the corrosion control treatment. If, after optimal corrosion control treatment has been implemented, the lead level or the copper level in the water continues to exceed the action level, the Water System must replace 7% of the lead or copper water lines that it owns. Alternatively, the supplier may demonstrate through testing that individual lead or copper service lines that it owns do not have levels above the applicable action level (called "sampling in lieu of replacement"). The Water System may perform a combination of these to actions to attain the 7% annual replacement level.

The Water System is in full compliance with the Lead and Copper Rule. Based on 2014 results, the Water System achieved 90th-percentile levels of lead and copper, well below the applicable action levels.

Coliform Levels. The Total Coliform Rule ("TCR") became effective in 1990. It establishes goals and limits for the presence of coliforms in drinking water. To comply with the TCR, the Water System must not find coliforms in more than 5% of the samples it takes each month to meet EPA's standards. If more than 5% of the samples contain coliforms, the Water System must report this violation to the State and the public. If a sample tests positive for total coliforms, the Water System must collect a set of repeat samples located within five or fewer sampling sites adjacent to the location of the routine positive sample within 24 hours. When a routine or repeat sample tests positive for total coliforms, it must also be analyzed for fecal coliforms or E. coli, which are types of coliform bacteria that are directly associated with fresh

feces. A positive result for fecal coliforms or E. coli can signify an acute violation of the TCR, which necessitates rapid State and public notification because it represents a direct health risk. Often, an acute violation due to the presence of fecal coliform or E. coli will result in a "boil water" notice. The Water System must also take at least five routine samples the next month of operation if any sample tests positive for total coliforms.

The Water System is in compliance with the TCR.

*Disinfectants*. Stage 1 of the Disinfectants/Disinfection By-Products Rule ("D/DBPR") was promulgated in 1998 and became effective on January 1, 2002. Stage 2 of the rule was promulgated in January 2006 and became effective on March 6, 2006. These rules establish limits on levels in drinking water of various types of disinfectants commonly used in water treatment processes.

The Water System is in compliance with both Stage 1 and Stage 2 of the D/DBPR.

Surface Water Treatment. Surface water treatment standards are set out, in part, by the EPA in its Interim Enhanced Surface Water Treatment Rule (the "Interim ESWTR"), which was promulgated in December 1998, and became effective on January 1, 2002. The Interim ESWTR establishes treatment requirements to combat certain microbial pathogens in drinking water. If water samples show levels in excess of monitoring criteria, the Interim ESWTR requires that the Water System revise its operating procedures and conduct follow-up investigations.

The EPA's Long-Term Enhanced Surface Water Treatment Rule ("Long-Term ESWTR") supplements existing regulations by targeting additional treatment requirements to higher risk systems. This rule also contains provisions to reduce risks from uncovered finished water reservoirs and to ensure that systems maintain microbial protection when they take steps to decrease the formation of disinfection byproducts that result from chemical water treatment.

The Water System is in compliance with all requirements of the Interim ESWTR and the Long-Term ESWTR.

*Consumer Confidence Reports*. The Safe Water Drinking Act, as amended in 1996, requires the Water System to issue an annual water quality report to its customers. The Water System has complied with this requirement in substance and form since 1996.

**Recycled Wastewater**. The Filter Backwash Recycling Rule ("FBRR"), which became effective in December 2003, governs the process of recycling wastewater generated by the backwashing of drinking water filters. The FBRR is required by the Safe Drinking Water Act as one method of reducing the risks posed to consumers by microbial contaminants that may be present in public drinking water supplies.

The Carrolton WTP operates in compliance with the treatment requirements of the FBRR. The Algiers WTP, however, does not have the capacity to comply with the FBRR; thus, it discharges filter backwash and wastewater by pipe to the Mississippi River pursuant to LPDES permit LA0061191, which was effective on June 1, 2013 and expires on May 31, 2018.

**Source Water Assessment.** The Safe Drinking Water Act, as amended in 1996, requires each state to develop a source water assessment program designed to protect source water prior to treatment. The source water assessment for the Water System was completed in 2001.

*Arsenic*. The EPA established the Arsenic Rule (the "Arsenic Rule") in 2001. The Arsenic Rule establishes a maximum allowable limit of arsenic in drinking water (1 microgram per liter). The Water System is in compliance with the Arsenic Rule.

FOR A FURTHER DESCRIPTION OF VARIOUS MATTERS IMPACTING THE OPERATION OF THE WATER SYSTEM, SEE APPENDIX "D" - CONSULTING ENGINEER'S REPORT ATTACHED HERETO.

# **Governmental Regulation - State**

**Department of Environmental Quality**. Part 2, Title 30 of the Louisiana Revised Statutes, the "Louisiana Environmental Quality Act," created the Department of Environmental Quality (the "DEQ"). The DEQ has jurisdiction over matters affecting the regulation of air quality, water pollution control, solid waste disposal, radiation, the protection and preservation of scenic rivers and streams, and the management of hazardous waters. The Secretary of the DEQ is authorized to establish pollution standards for waters of the State and to control or prohibit the discharge of polluting substances into State waters and to otherwise promulgate rules and regulations for the protection of the environment.

The Secretary of the DEQ has adopted water quality criteria, approved by the EPA under the Clean Water Act, which regulate the temperature, chemical and bacteriological content of waterways in the State. Specific criteria are established for various zones. The regulations provide that the failure of any stream or other waterway to meet the criteria shall not be the result of the discharge of waste to the water body. Violators are subject to prohibiting orders enforceable in the courts and to criminal penalties. Civil damages are recoverable by the Secretary for violations resulting in the killing of fish or other wildlife or the rendering of a water body unfit to support such wildlife.

*Emergency Rule*. The State of Louisiana Department of Health and Hospitals - Office of Public Health, recently established a new temporary emergency rule (the "Emergency Rule") focused on minimizing the opportunity for pathogenic amoeba to colonize within the water distribution systems within the State. The rule requires systems to maintain minimum disinfection levels, and to conduct additional disinfectant residual sampling in certain areas. The Water System is in compliance with the Emergency Rule.

# **Capital Improvement Program**

The Board maintains an ongoing ten-year capital improvement program (the "Capital Improvement Program") for the Water, Sewer and Drainage Systems that it funds from a variety of sources, including (but not limited to) bond proceeds, grants, Net Revenues, and certain revenues received by the City and paid to the Board pursuant to cooperative endeavor agreements between the City and the Board (the "Fair Share Revenues"). See "MANAGEMENT'S DISCUSSION AND ANALYSIS – Fair Share Revenues" herein for more information. The projects funded via the Capital Improvement Program consist of projects to ensure compliance with the Board's various legal obligations, infrastructure projects undertaken in consultation with the City, and other improvements to the Water, Sewer and Drainage Systems prioritized by the Board.

#### WATER SERVICE CHARGES AND CUSTOMER BASE

# **Water Service Charges**

Water services rates are fixed by the Board but may not become effective, except as hereinafter noted, unless and until approved by the Board of Liquidation and the City Council. Prior to any adjustment in the rates, the Board must hold at least three public meetings for the purpose of discussing the rates. The rates are required by law to be equal and uniform for each grade or class of customers. The rates are designed to recover the operation, maintenance and capital costs of the Water System from each customer class, based upon the cost of providing water to the class.

So long as any Bonds are outstanding, the Board is required by statute and by the Bond Resolution authorizing the issuance of the Series 2021 Bonds to fix water rates sufficient to enable the Board to meet the Rate Covenant. See "SECURITY AND SOURCE OF PAYMENT - Rate Covenant and Financial Forecast" herein. If the Board should ever fail to increase water rates to the extent necessary to satisfy the Rate Covenant, the Board of Liquidation may compel it to do so by appropriate judicial proceedings. No such action has ever been required to be taken by the Board of Liquidation.

Water rates are composed primarily of a monthly service charge based upon the size of the water meter and monthly quantity charges based upon water consumption. Additional charges are levied for fire connections, dual service (combined fire and domestic service), water supplied from fire hydrants for temporary use, fire protection hose lines and water supplied to the Port of New Orleans. On July 18, 2002, a rate increase to generate 12% in additional revenues, which was approved in 1998, was implemented by the Board. Following Hurricane Katrina, the Board implemented a program of five annual rate increases. These increases had been developed and proposed in 2005, but Hurricane Katrina struck before they could be approved. As part of the initial rate increase, the rate structure was modified to four blocks from three blocks, with the previous first block being split into two blocks. The initial rate increase became effective November 1, 2007 and increased the volumetric rate targeting 21% in additional revenue. Subsequent rate increases became effective July 1 of 2008, 2009, 2010, and 2011 and were targeted to generate 17%, 5%, 5%, and 4% in additional revenue, respectively.

In late 2012, the Board, the Board of Liquidation, and the City Council adopted a series of annual 10% rate increases over an eight-year period, beginning January 1, 2013. The final approved rate increase took effect on January 1, 2020. Future rate increases, if any, will require approval of the Board, the Board of Liquidation, and the City Council.

The following tables provide a schedule of charges and surcharges of the Water System commencing January 1, 2015. Water System charges consist of (a) monthly service charges for (i) general service private users, (ii) dual-service users, and (iii) unmetered fire services, and (b) water quantity charges at a volumetric rate for all metered services.

Water Service Charge: General Service

<b>Total Monthly Charge (\$) - Service Charge</b>					
<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
5.40	5.94	6.53	7.18	7.90	8.69
6.60	7.26	7.99	8.79	9.67	10.64
8.38	9.22	10.14	11.15	12.27	13.50
13.84	15.22	16.74	18.41	20.25	22.28
18.24	20.06	22.07	24.28	26.71	29.38
41.26	45.39	49.93	54.92	60.41	66.45
71.87	79.06	86.97	95.67	105.24	115.76
141.09	155.20	170.72	187.79	206.57	227.23
209.87	229.87	252.86	278.15	305.97	336.57
283.50	311.85	343.04	377.34	415.07	465.58
332.75	366.03	402.06	442.89	487.18	535.90
443.22	487.54	536.29	586.92	648.91	713.80
	5.40 6.60 8.38 13.84 18.24 41.26 71.87 141.09 209.87 283.50 332.75	201520165.405.946.607.268.389.2213.8415.2218.2420.0641.2645.3971.8779.06141.09155.20209.87229.87283.50311.85332.75366.03	2015         2016         2017           5.40         5.94         6.53           6.60         7.26         7.99           8.38         9.22         10.14           13.84         15.22         16.74           18.24         20.06         22.07           41.26         45.39         49.93           71.87         79.06         86.97           141.09         155.20         170.72           209.87         229.87         252.86           283.50         311.85         343.04           332.75         366.03         402.06	2015         2016         2017         2018           5.40         5.94         6.53         7.18           6.60         7.26         7.99         8.79           8.38         9.22         10.14         11.15           13.84         15.22         16.74         18.41           18.24         20.06         22.07         24.28           41.26         45.39         49.93         54.92           71.87         79.06         86.97         95.67           141.09         155.20         170.72         187.79           209.87         229.87         252.86         278.15           283.50         311.85         343.04         377.34           332.75         366.03         402.06         442.89	2015         2016         2017         2018         2019           5.40         5.94         6.53         7.18         7.90           6.60         7.26         7.99         8.79         9.67           8.38         9.22         10.14         11.15         12.27           13.84         15.22         16.74         18.41         20.25           18.24         20.06         22.07         24.28         26.71           41.26         45.39         49.93         54.92         60.41           71.87         79.06         86.97         95.67         105.24           141.09         155.20         170.72         187.79         206.57           209.87         229.87         252.86         278.15         305.97           283.50         311.85         343.04         377.34         415.07           332.75         366.03         402.06         442.89         487.18

Water Service Charge: Dual Service

<b>Meter Size (Inches</b>	<b>Total Monthly Charge (\$) - Service Charge</b>					
	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
5/8	7.33	8.06	8.87	9.76	10.74	11.81
3/4	8.92	9.81	10.79	11.87	13.06	14.37
1.0	11.72	12.89	14.18	15.60	17.16	18.88
1-1/2	18.24	20.06	22.07	24.28	26.71	29.38
2.0	26.09	28.70	31.57	34.73	38.20	42.02
3.0	57.90	63.69	70.06	77.07	84.78	93.26
4.0	101.16	111.28	122.41	134.65	148.12	162.93
6.0	196.99	216.69	238.36	262.20	288.42	317.26
8.0	292.82	322.10	354.31	389.74	428.71	471.58
10.0	396.64	436.30	479.93	527.92	580.71	638.78
12.0	465.85	512.44	563.68	620.05	682.06	750.27
16.0	620.25	682.28	750.51	825.56	908.12	998.93

**Water Service Charge: Unmetered Fire Service** 

**Meter Size (Inches)** 

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
2.0	12.24	13.46	14.81	16.29	17.92	19.71
3.0	16.64	18.30	20.13	22.14	24.35	26.79
4.0	30.61	33.67	37.04	40.74	44.81	49.29
6.0	53.24	58.56	64.42	70.86	77.95	85.75
8.0	70.54	77.59	85.35	93.89	103.28	113.61
10.0	111.80	122.98	135.28	148.81	163.69	180.06
12.0	145.08	159.59	175.55	193.11	212.42	233.66
16.0	199.65	219.62	241.58	265.74	292.31	321.54

# **Water Quantity Charge (Volumetric Rate)**

Total Monthly Charge (\$) - Quantity Charge (billed per 1,000 gallon increments)

	2015	2016	2017	2018	2019	2020
First 3,000 gallons	3.59	3.95	4.35	4.79	5.27	5.80
Next 17,000 gallons	6.13	6.74	7.41	8.15	8.97	9.87
Next 980,000 gallons	4.82	5.30	5.83	6.41	7.05	7.76
Over 1,000,000 gallons	4.04	4.44	4.88	5.37	5.91	6.50
Wholesale Customers (all usage)	3.85	4.24	4.66	5.13	5.64	6.20

Water for building, paving, or other temporary uses is subject to the same quantity charges listed above. A minimum charge for such service of \$199.21/month, however, is charged, which covers the use of up to 51,200 gallons of water. This charge must be paid in advance.

In the event the effective date of an increase in charges and/or surcharges falls during a customer's billing cycle, then the increases shall be pro-rated and billed only with respect to the number of days in the billing cycle which fall on or after the effective dates set forth above.

# **Service Charge Comparison**

The Board's water service charges for a typical residential customer with a 5/8" meter connection and 5,000 gallon/month water usage are comparable to those of other water utilities in the region. As shown below, the monthly water service charge for a residential customer using 5,000 gallons of water is \$45.83, which amounts to \$549.96 per year. The 2018 median household income ("MH") of Orleans Parish is estimated \$39,576. Escalating this amount by 1.0% annually results in an estimated MHI of \$40,371 in 2020, which means a typical residential customer spends approximately 1.36% of median household income on water services, an amount that is well below the 2.50% guideline that is commonly used in the industry to evaluate the affordability of service rates.

Monthly Water Bill			
City	Monthly Bill (5,000 gallons/month) <sup>[1]</sup>		
Dallas	\$16.95		
Mobile	21.22		
Baton Rouge	21.53		
Nashville	25.21		
Jackson	28.95		
Houston	31.46		
Atlanta	34.63		
St. Louis	35.70		
New Orleans 2020	45.83		
Birmingham	47.02		

<sup>[1]</sup> The cost comparison is based upon a projected monthly bill for a residential customer with a 5/8" meter (some utilities listed may use a 3/4" meter for residential customers) and 5,000 gallons of water usage. Amounts are based on rates effective as of January 1, 2021.

Source: Raftelis Financial Consultants, Inc.

The water service bill for the average customer increased from \$28.43/month in fiscal year 2015 to \$45.83/month to fiscal year 2020. During the forecast period, the greatest percentage of median household income on which a typical residential customer will spend on water services is projected to be 1.36% in fiscal year 2020.

The Board expects the average water bill for the representative communities shown above to also increase during this period. The magnitude of rate increases for the representative communities is unknown and may be higher or lower than those anticipated for the Water System. National survey results based on the AWWA/RFC 2018 Water and Wastewater Rate Survey show that median typical residential water bills have increased approximately 5.4% per year from 2008 to 2018. See APPENDIX "E" - Financial Consultant's Feasibility Report attached hereto.

# Collection of Sanitation Fees by the Board

The City assesses a sanitation fee upon each customer of the Board for solid waste collection and recycling services provided by the City for each customer. The fee is \$24 per month for residential, business, professional, or service office and institutional uses and \$48 per month for commercial, industrial, and manufacturing uses. The fee is included in each customer's bill from the Board and paid directly to the Board. Pursuant to Codified Ordinances of the City and by agreement with the City (the "Cooperative Endeavor Agreement"), the Board remits moneys collected by the Board that are attributable to the City's sanitation fee (less any fees incurred by the Board in collecting such moneys) to the City. Sanitation fees collected by the Board do not constitute Revenues, and thus are not part of the Net Revenues pledge.

Pursuant to Section 138-57 of the City's Codified Ordinances and a Cooperative Endeavor Agreement, the Board is now obligated to discontinue a customer's water service if that customer fails to pay the City's sanitation fee. To assist customers who may otherwise become delinquent on their sanitation

fees, the City maintains a Reduced Sanitation Rate Program through which qualifying customers may become exempt from any sanitation fee rate increase in excess of the applicable rate that was in effect on December 1, 2000. This exemption may apply for up to 12 months for a qualified applicant. The Cooperative Endeavor Agreement provides that other than discontinuing water service, the collection of sanitation fees by the Board shall not impair or affect, in any way, the Board's ability to collect fees for its water and sewerage services. The newly created requirement that the Board discontinue water service of customers with delinquent sanitation fees is not expected to materially affect the Board's ability to generate anticipated revenues.

The Board has suspended its water shut-off and late fee policies, as have many other water utilities, as customers continue to be affected by the COVID-19 pandemic. The suspension of these policies applies to all charges on the bill, including the sanitation fees that the Board collects on behalf of the City. See "MANAGEMENT'S DISCUSSION AND ANALYSIS – Collection of Past Due Invoices" herein.

#### **Customer Demand**

The chart below provides historical customer and sales figures for fiscal years 2017 through 2019. Funds for the operation, maintenance, and debt service requirements of the Water System are obtained from water service charges. The balance of revenue remaining after meeting these costs may be used for cash financing of capital improvements as required and other lawful purposes. See "SECURITY AND SOURCE OF PAYMENT- Special Funds and Application of Revenues" herein.

**Historical Customers and Sales** 

	Historical			
	<u>2017</u>	<u>2018</u>	2019	
Single Family Residential				
Accounts	117,459	118,526	119,182	
Annual Metered Consumption				
(1,000 Gallons)	7,049,683	8,003,299	7,118,095	
Average Metered Consumption per Account				
(1,000 Gallons per Month)	5.00	5.63	4.98	
Multifamily Residential				
Accounts	4,658	4,623	4,589	
Annual Metered Consumption				
(1,000 Gallons)	724,520	888,418	753,801	
Average Metered Consumption per Account				
(1,000 Gallons per Month)	12.96	16.01	13.69	
Commercial				
Accounts	12,821	12,787	12,813	
Annual Metered Consumption				
(1,000 Gallons)	6,595,721	6,443,709	6,120,766	
Average Metered Consumption per Account				
(1,000 Gallons per Month)	42.87	41.99	39.81	
Industrial				
Accounts	34	32	32	
Annual Metered Consumption				
(1,000 Gallons)	204,912	229,810	230,082	
Average Metered Consumption per Account				
(1,000 Gallons per Month)	502.24	598.46	599.17	
Totals				
Accounts	134,972	135,968	136,616	
Annual Metered Consumption				
(1,000 Gallons)	14,574,836	15,565,235	14,222,743	
Average Metered Consumption per Account				
(1,000 Gallons per Month)	9.00	9.54	8.68	

[2020 information not yet available.]

Source: Raftelis Financial Consultants, Inc.

# **Billing Procedures**

Water service charges are billed and collected by the Board. The residential, multi-residential, commercial, and industrial meters are read and billed monthly. All revenue applications are processed and supported by the Information Systems Department on the Board's computer network.

The Board delivers one monthly bill to each customer detailing the amounts owed by that customer for services provided by the Sewerage System, the Water System, and the City's sanitation services, respectively. In the event of a partial payment of amounts owed by customers under the current billing

system, the payment is first applied to delinquent sewer and water balances, then to current sewer and water balances, then to delinquent sanitation balances, and finally to current sanitation balances.

## **Collection Procedures**

The Board's standard automated collection enforcement system takes effect after an account is at least 60 days past the due date and has a balance of at least \$50.00. The delinquent action consists of a 10-day notice of termination of service to the service address of the customer of record and also to the mailing address if different. In the case of multi-residential or commercial customers, a notice is posted on the front door of the premises. In the event of any billing dispute, the notice of termination of service also advises the manner in which a customer may request an impartial evidentiary hearing before a Customer Review Officer, who has full authority to order adjustment of the bill if necessary. The Board's average annual collection rate since 2010 is approximately 98%. See, however, "MANAGEMENT'S DISCUSSION AND ANALYSIS – Collection of Past Due Invoices" herein.

The Board administers its Water Help Program for qualifying customers in need of assistance with their water service bills. Importantly, this assistance program is only available to customers in a single-family dwelling. The program is funded in part by voluntary one-dollar customer contributions to which the Board provides matching funds. There are approximately 640 participants in the Water Help Program.

It is the policy of the Board to write off unpaid final delinquent accounts after three years.

# "Non-Revenue Water" of the Water System

As discussed in the Consulting Engineer's Report under the heading "WATER SYSTEM PLANNING INITIATIVES AND COMPLIANCE-Water Accountability" (see APPENDIX "D" attached hereto), the Board has a high percentage (approximately 74.3%) of "non-revenue water," i.e., water that is either metered and accounted for but provided at no cost, or "Unmetered Use" (water that is categorized as unidentified leaks, accounted for leaks, or unmetered water used in firefighting or the flushing of sewers). The Unmetered Use accounted for approximately 71.6% of the Board's total pumped water in 2017. That discussion in the Consulting Engineer's Report describes several initiatives that the Board is currently planning or conducting to address the issue of non-revenue water.

# **Largest Customers of the Water System**

The Water System has a diverse customer base and does not depend on one or several high-volume customers for a large portion of its revenue. As shown in the chart below, not one of the Water System's ten largest customers accounted for more than 1.15% of the Water System's total fiscal year 2019 revenue, and all of the top ten, combined, only accounted for approximately 5.90% of the Water System's revenues.

	<b>Annual Gallons</b>	FY 2019	% of
<b>Customer Name</b>	Used (1,000s)	Water Revenue	Water Revenue
Tulane University	184,723	\$1,299,475	1.15%
NASA MAF6216002	170,587	1,017,911	0.90
Board of Commission	128,827	917,641	0.81
LSU Health Sciences Center	87,812	604,932	0.53
Children's Hospital	93,242	593,830	0.52
Touro Infirmary	82,405	516,976	0.46
Xavier University	64,733	482,650	0.43
Loyola University	68,931	475,015	0.42
United States Postal Service	64,618	401,033	0.35
VA Dept. of Veterans Affairs	61,123	<u>379,368</u>	<u>0.33</u>
TOTAL	<u>1,007,000</u>	<u>\$6,688,830</u>	<u>5.90%</u>
2019 Sales of Water		\$113,339,213	

Source: Raftelis Financial Consultants, Inc. [2020 information not yet available.]

# **Operating Revenues**

Water System operating revenue consists of operating revenues based on the schedule of water service charges and delinquent fees as discussed above. See "WATER SERVICE CHARGES AND CUSTOMER BASE – Historical Financial Operations" and "- Projected Financial Operations" herein.

# **Non-Operating Revenues**

Water System non-operating revenue includes interest earned on the investment of available funds, and other minor items of revenue. Earned interest comes from investments in the Water System Fund and the capital projects and Construction Fund. Historical non-operating revenues are also shown in a following table. Non-operating revenues of the Board attributable to the Water System are minimal. The Board does not anticipate that such revenues will materially increase from fiscal year 2020 to fiscal year 2025.

#### **Operation and Maintenance Expenses**

The Board utilizes a system of accounts designed to group expenses by function for budget purposes. Under the present system of accounts, expenses are categorized under the classifications of operating expenses, non-operating expenses, or other budgeted expenditures and transfers. Management and general expenses include wages, materials and supplies, services, and other costs. Operations expenses encompass the costs of collecting, pumping, treating and distributing water. Other expenses include such items as general insurance, outside services employed, social security, worker's compensation insurance, pension and medical insurance contributions, and miscellaneous expenditures. Historical operations and maintenance expenses are shown in a following table. See "WATER SERVICE CHARGES AND CUSTOMER BASE – Historical Financial Operations" herein.

# Financial Information Relating to the Water System - Cash and Equivalents

The Board reported the following cash and cash equivalents balances in its Water System funds as of December 31, 2019 (rounded to the nearest dollar):

Unrestricted and undesignated cash and cash equivalents	\$32,211,223
Designated cash, cash equivalents, and investments	-
Customer Deposits	-
Restricted cash and cash equivalents for capital projects	3,091,335
Health insurance reserve	638,113
Debt service reserve	16,580,927

Source: The Board's 2019 Comprehensive Annual Financial Report. [2020 information not yet available.]

# **Historical Financial Operations**

NOTE: HISTORICAL DATA INCLUDED HEREIN IS PRESENTED FOR INFORMATION PURPOSES ONLY AND IS NOT A FORECAST OF FUTURE OPERATIONS. ADOPTED AND PROPOSED RATE INCREASES, BOND ISSUES, FEDERAL MATCHING FUNDS, PROPOSED CAPITAL IMPROVEMENTS AND OTHER COSTS MAY SIGNIFICANTLY CHANGE THE REVENUES AND EXPENDITURES OF THE WATER SYSTEM FROM HISTORICAL INFORMATION.

Historical financial operations of the Water System consist of water service charges, fees, and other sources, operation and maintenance expenditures, and debt service charges which are summarized from 2015 through 2019 in the following table [2020 information not yet available]:

## Historical Statement of Revenues, Expenses, Debt Service, and Debt Service Coverage [1]

A - ( - - | O - | - - - | - - - | V - - - | F - - | | | - - - | D - - - - - | - - - | 04

	Actual Calendar Year Ending December 31,				
	2015	2016	2017	2018	2019
Revenues:					
Operating Revenues:	<b>^-</b>			<b>***</b>	<b>***</b>
Sales of Water and Delinquent Fees	\$78,007,937	\$83,158,940	\$90,464,810	\$90,287,081	\$113,339,213
Plumbing Inspection & License Fees	305,384	319,991	297,115	319,127	293,773
Subtotal: Water Charges and Fees	\$78,313,321	\$83,478,931	\$90,761,925	\$90,606,208	\$113,632,986
Other Revenues	\$3,416,155	\$2,506,704	\$1,707,271	\$1,912,736	\$3,011,749
Total Operating Revenues	\$81,729,476	\$85,985,635	\$92,469,196	\$92,518,944	\$116,644,735
Non-Operating Revenues:					
Interest Income	\$966,949	\$2,104,903	\$1,923,464	\$1,723,942	\$729,371
Contribution from Other Governments [2]	0	0	0	0	6,516,802
Other Non-Operating Revenue	261,126	275,740	264,874	343,336	264,768
Total Non-Operating Revenues	\$1,228,075	\$2,380,643	\$2,188,338	\$2,067,278	\$7,510,941
Adjustment [3]	\$0	\$0	\$0	\$8,927,977	\$0
Total Revenues	\$82,957,551	\$88,366,278	\$94,657,534	\$103,514,199	\$124,155,676
_					
Expenses: Total Operating Expenses [4]	\$84,854,293	\$89,478,097	\$100,246,946	\$106,424,957	\$110,311,595
Less Adjustments [5]:	φ04,034,293	\$09,470,097	\$100,240,940	\$100,424,937	\$110,311,393
Depreciation	\$10,414,611	\$10,177,757	\$12,216,937	\$12,349,399	\$12,643,499
Pension Non-Cash Expense	1,147,689	1,809,707	1,694,490	4,319,190	3,063,937
OPEB Non-Cash Expense	2,123,424	2,000,442	935,018	460	2,594,642
Extraordinary Expenses	0	487,600	7,562,476	8,916,109	9,504,104
Total Adjustments	\$13,685,724	\$14,475,506	\$22,408,921	\$25,585,158	\$27,806,182
Adjusted Operating Expenses [6]	\$71,168,569	\$75,002,591	\$77,838,025	\$80,839,799	\$82,505,413
Net Revenues	\$11,788,982	\$13,363,687	\$16,819,509	\$22,674,400	\$41,650,263
Total Debt Service:					
Senior Debt Payment	\$3,500,000	\$7,971,525	\$12,640,550	\$13,333,550	\$13,394,550
Total Debt Service	\$3,500,000	\$7,971,525	\$12,640,550	\$13,333,550	\$13,394,550
Senior Debt Service Coverage	3.37	1.68	1.33	1.70	3.11
Net Revenue after Debt Service	\$8,288,982	\$5,392,162	\$4,178,959	\$9,340,850	\$28,255,713
Ending Balance of Available Funds [7]	\$39,253,304	\$38,383,800	\$29,823,726	\$38,771,396	\$33,211,223
Days of Cash on Hand	201	187	140	175	147

The data for this schedule is derived primarily from the Board's Comprehensive Annual Financial Reports (CAFRs).

Source: Raftelis Financial Consultants, Inc.

Contributions from Other Governments consist of "Fair Share" revenue from the City of New Orleans for infrastructure funding. Such funding is considered as a revenue for debt service coverage purposes to the extent allocated to the Water System, pursuant to an opinion provided by the Board's bond counsel.

<sup>[3]</sup> The increase in revenues is derived from a rate increase that went into effect January 1, 2019. The Board recognized the adopted 2019 rate increases to meet debt service coverage requirements in 2018 pursuant to Section 7.01(c) of the General Bond Resolution. Total operating expenses as reported in the CAFR including all cash and non-cash items such as depreciation.

<sup>[5]</sup> Adjustments include the deduction of depreciation, pension non-cash expenses, OPEB non-cash expenses, and extraordinary expenses from total operating expenses pursuant to the General Bond Resolution. Extraordinary expenses are those identified pursuant to the definition of "extraordinary, nonrecurring, and non-continuing" in the General Bond Resolution.

Adjusted Operating Expenses for the historical period are comparable to Operating Expenses for the projections shown in Exhibit 1.

Ending balances shown include unrestricted and undesignated cash and cash equivalents, cash and cash equivalents designated for capital projects, other designated cash, and deposits.

# **Projected Financial Operations**

The following table reflects projected financial operations for the Water System based on expected water service charges, delinquent fees, and other sources, operation and maintenance expenditures, and debt service charges for fiscal years 2020 (estimated) and 2021 through 2025 (projected). For a discussion of the assumptions underlying the projections below, see APPENDIX "E" - Financial Consultant's Feasibility Report attached hereto.

#### Forecast Statement of Revenues, Expenses, Debt Service, and Debt Service Coverage

Projected Calendar Year Ending December 31, 2020 (Est.) 2021 2022 2023 2025 2024 Revenues: **Operating Revenues:** \$125,055,319 Sale of Water and Delinquent Fees [1] \$114 871 322 \$115,626,250 \$117,842,420 \$120,199,268 \$122,603,254 307,078 307,078 224,483 307,078 307,078 307,078 Plumbing Inspection and License Fees Subtotal: Water Charges and Fees \$115,095,805 \$125,362,397 \$115,933,328 \$118,149,498 \$120,506,346 \$122,910,332 \$4,047,840 \$1,725,600 Other Revenues [2] \$1,725,600 \$1,725,600 \$1,725,600 \$1,725,600 **Total Operating Revenues** \$119,143,645 \$117,658,928 \$119,875,098 \$122,231,946 \$124,635,932 \$127,087,997 Non-Operating Revenues: Interest Income \$987,419 \$1,076,700 \$1,225,300 \$1,246,000 \$1,237,900 \$1,199,000 Contribution from Other Governments [3] 1,187,759 1,187,759 1,187,800 1,187,800 1,187,800 1,187,800 Other Non-Operating Revenue 290,838 260,626 260,600 260,600 260,600 260,600 0 0 0 0 0 0 FEMA O&M Expense Reimbursement [4] \$2,466,016 \$2,525,085 \$2,673,700 \$2,694,400 \$2,686,300 \$2,647,400 **Total Non-Operating Revenues** \$121,609,661 \$122,548,798 \$120,184,013 \$124,926,346 \$127,322,232 \$129,735,397 **Total Revenues** Expenses: Operating Expenses [5] \$84,474,605 \$92,425,158 \$95,516,065 \$98,727,065 \$102,072,065 \$105,538,065 **Net Revenues** \$37,135,056 \$27,758,855 \$27,032,733 \$26,199,281 \$25,250,167 \$24,197,332 Senior Debt Service: Existing [6] \$13,473,550 \$1,403,600 \$5,598,600 \$5,598,250 \$5,599,000 \$5,598,750 Proposed Series 2021 [7] 3,452,818 7,138,114 7,142,739 7,141,045 7,139,910 \$12,740,045 Senior Debt Service \$13,473,550 \$4,856,418 \$12,740,989 \$12,738,660 \$12,736,714 Senior Debt Service Coverage [8] 2.76 5.72 2.12 2.06 1.98 1.90 **Subordinate Debt Service:** Future LDH Loan Debt Service [9] \$0 \$0 \$556,700 \$1,113,400 \$1,670,100 \$2,226,800 Subordinate Debt Service \$0 \$0 \$556,700 \$1,113,400 \$1,670,100 \$2,226,800 **Total Debt Service** \$13,473,550 \$4,856,418 \$13,293,414 \$13,854,389 \$14,410,145 \$14,965,460 Total Debt Service Coverage [10] 2.76 2.03 1.75 5.72 1.89 1.62 Rate Covenant Net Revenues: \$37,135,056 \$27,758,855 \$27,032,733 \$26,199,281 \$25,250,167 \$24,197,332 Less: Transfers from Rate Stabilization Less: Grants **Adjusted Rate Covenant Net Revenues** \$37,135,056 \$27,758,855 \$27,032,733 \$26,199,281 \$25,250,167 \$24,197,332 Total Debt Service Coverage on Adjusted **Rate Covenant Net Revenues** 2.76 5.72 2.03 1.89 1.75 1.62 Net Revenue After Debt Service \$23,661,506 \$22,902,437 \$13,739,318 \$12,344,892 \$10,840,022 \$9,231,872 Other Expenditures: Revenue Funded Capital \$34,310,136 \$12,000,000 \$12,000,000 \$12,000,000 \$12,000,000 \$12,000,000 Debt Service Reserve (Release) [11] 0 (7,874,550)0 \$34,310,136 \$12,000,000 \$12,000,000 \$12,000,000 \$12,000,000 \$4,125,450 **Total Other Expenditures** \$1,739,318 (\$10,648,630) \$18,776,987 \$344,892 (\$1,159,978) (\$2,768,128) Total Surplus/(Deficit) **Ending Balance of Available Funds** \$22,562,593 \$43,078,898 \$43,423,790 \$42,263,812 \$39,495,684 \$41,339,580 Days of Cash on Hand 97 163 165 161 151 137

Footnotes on following page.

#### Footnotes:

- [1] Sale of Water and Delinquent Fees include all revenues generated from the monthly water charges, including delinquent fees. See Explanatory Note 5 of Appendix E attached hereto for further details. The forecast shown above assumes the following rate adjustments by year:
  - 2020 and 2021: Rates as adopted as of the date of the report attached hereto as Appendix E.
  - 2022: 2.0% water rate increase (assumed to be effective January 1, 2022).
  - 2023: 2.0% water rate increase (assumed to be effective January 1, 2023).
  - 2024: 2.0% water rate increase (assumed to be effective January 1, 2024).
  - 2025: 2.0% water rate increase (assumed to be effective January 1, 2025).
- [2] The majority of Other Revenues in 2020 represents payments by vendors for damages during work performed for the Board.
- [3] Contribution from Other Governments are comprised of Fair Share revenue allocated to the Water System.
- [4] As of the date of this report, no FEMA grants are anticipated during the forecast period.
- [5] See Explanatory Note 6 in Appendix E attached hereto for further detail. Operating Expenses shown herein are comparable to the historical Adjusted Operating Expenses shown in Exhibit 2 of Appendix E attached hereto.
- [6] Further detail on existing debt can be found in Explanatory Note 8 of Appendix E attached hereto.
- [7] Annual debt service for the Series 2021 bonds provided by the Board's managing underwriter on February 4, 2021
- [8] Rate covenant requires coverage of 1.25x on senior debt service.
- [9] Debt service assumes \$10 million per year new SRF loans, starting in 2021 with repayment beginning the year after issuance (i.e., the first SRF loan in 2021 begins debt service in 2022). Debt amortization is assumed over a 20-year period, 1.0% interest rate with one year capitalized interest.
- [10] Rate covenant requires coverage of 1.10x on total senior and subordinate debt service.
- [11] Some or all of the savings to be realized in 2021 may be dedicated to capital and/or other non-recurring expenditures by the Board, which could lower cash balances and days cash on hand as a result.

Source: Raftelis Financial Consultants, Inc.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## General

The Board's 2019 Comprehensive Annual Financial Report shows the Water System trending towards financial stability. The Board was in the next-to-last year of an eight-year rate increase program (See "WATER SERVICE CHARGES AND CUSTOMER BASE – Water Service Charges" herein) and experienced year-over-year increases in Net Revenues (to \$41,650,263 from \$22,674,402) and debt service coverage ratio (to 3.11x from 1.70x) as determined by the Qualified Independent Consultant. At the end of 2019, the Water System's unrestricted cash and cash equivalents equaled 147 days.

The Board's solid financial performance continued in the first quarter of 2020, with Revenues increasing over the same period in 2019 by more than 20%. Collections averaged over \$8.9 million per month in the first quarter of 2020, one of the highest quarters in the Board's history. The available cash on hand for the Water System at the end of the first quarter of 2020 was 123 days.\*

As expected, however, COVID-19 caused a negative financial impact to the Board beginning in April 2020. The number of total payments received by the Board in April, May, and June 2020 fell precipitously, and Water System collections were approximately \$0.7 million less than in the same three-month period in 2019. Revenues rebounded and stabilized in the third quarter of 2020, resulting in a year over year comparison increase of 6.5%. Revenues through the third quarter of 2020 are 1.8% below the year-to-date Water System budget; however, Operating Expenses are 20.6% below the year-to-date budget, resulting in an increase in year-to-date Net Revenues over the budgeted amounts.\*

The Board attributes its strong performance in 2019 and the first quarter of 2020, and its expected recovery from the financial difficulties caused by COVID-19, to proactive efforts by its administration and staff in confronting legacy and current issues. A description of the Board's reaction to the COVID-19 pandemic and the steps it has taken in other areas to improve operating and financial results follows.

Financial information related to the Board for Fiscal Year 2020 is not yet available.

#### **Reaction to COVID-19**

As the effects of COVID-19 began to surface in March 2020, the Board quickly addressed the impact of the pandemic on its employees and operations. The Board established a dedicated task force that was available around the clock, with a dedicated phone number for reporting concerns or answering questions. The Board made testing available for its employees and contact-traced those of concern. Any employee that tested positive or was in contact with anyone who tested positive was quarantined. The Board provided personal protection equipment for all employees.

The Board suspended operations at its headquarters on March 13, 2020, except for certain critical employees, and purchased laptops to enable all employees to continue to perform their duties while working from home. The Board has not yet completely resumed operations at its headquarters. The Board constantly and thoroughly cleans and disinfects all employee work spaces.

To help offset the financial impact of COVID-19, the Board has required that all departments limit spending, including hiring, to the most critical needs. Expenditures in excess of \$10,000 now require additional management approvals, even if already budgeted, and all hiring requests must be approved by

<sup>\*</sup> Figures in this paragraph are unaudited.

the Executive Director. The Board further enhanced its procedures to track cash trends more closely, giving it time to monitor impacts in specific areas and respond accordingly.

The Board has applied for funding but has not received any significant amount from the Federal CARES Act or other sources as reimbursement for costs related to COVID-19.

See "INVESTMENT CONSIDERATIONS – COVID-19 Impact" herein for more information on the impact of COVID-19 in the City and the State.

# **Billing System**

Customer billing has been the most challenging aspect of Board operations in recent years. Since the implementation of a new customer service management and billing system in 2016, the Board has seen continued problems with inaccurate bills. While customers experience a myriad of issues with their bills, the underlying cause for most issues is the same: use of estimates instead of actual reads to generate monthly bills. As a result, the Board developed an aggressive plan to increase meter reads and revised its estimation formula.

*Meter Reading.* The meter reading department was completely shut down because of the COVID-19 pandemic. As a result, the Board was forced to augment meter reading staff to increase the number of meters read each month. In August 2020, the Board contracted with an outside organization to bring on 20 additional readers. This outside team began reading meters in September 2020. In addition, the Board implemented a hiring initiative and increased the number of filled meter reading positions to 36 (out of 60 budgeted), with the remaining 24 readers currently in training and expected to be in the field by the end of February.

The Board also instituted a special incentive pay program for meter readers, which has been approved by the City's Civil Service Commission. This program provides additional pay for work performed above certain designated baselines. Employees are required to meet attendance and accuracy requirements in order to participate in the incentive pay program. Those eligible employees who meet the required criteria can see significant increases in annual compensation as a result.

The Board has developed a metric to chart the progress of the meter reading effort, with the ultimate goal of reading a minimum of 80% of its customers' meters every month. Since implementation in August, actual reads have increased from averaging 40% read of targeted reads per week to reading 60% to 90% of targeted reads per week. The Board is optimistic it will continue to meet or exceed its goal into 2021.

**Estimated Bills.** In addition to solving the root cause of the problem by increasing the number of actual meter reads, the Board has changed the formula used to estimate customer bills. Like most utilities, the Board estimates a customer's usage in months in which that customer's meter is not read, then provides a "true up" bill the next time the customer's meter is actually read.

The Board's prior formula sought two actual, undisputed meter reads within the last four months and averaged those two meter reads to estimate monthly usage for billing purposes; however, in situations in which two actual, undisputed reads in the last four months were not available, the Board billed at a default estimate of 170 gallons/day (an industry average). In the Board's experience, the default estimate was rarely accurate, leaving wide discrepancies in the "true up" bills when that customer's bill was next read. To address the issue, the Board revised the formula to instead look back ten months to find two actual, undisputed meter reads on which to base the estimated usage, with the goal of providing an estimate based

more on that customer's actual usage, rather than industry average. The Board expects that the revised formula will reduce the incidences of outrageously high "true up" bills.

Additionally, the Board issued a series of "catch up" bills in July 2020 to reset the clock on billing cycles. Several cycles – which are based on meter reading routes – had grown to longer than the desired cap of 32-34 days. These longer cycles caused higher bills, and some customers' accounts were pushed into higher water rate tiers as a result. Recognizing the effect of this issue, the Board made an effort to reset those cycles, restoring all billing cycles back to the more acceptable 28-32 day range.

Advanced Metering Infrastructure. In 2020, the Board completed a solicitation in connection with its ultimate goal of installing Advanced Metering Infrastructure ("AMI") technology and selected Jacobs Engineering as the Project Manager for the effort. Jacobs has scheduled an AMI kickoff seminar for early February 2021, and the Board anticipates that Phase 1 of the AMI project, consisting of an initial meter survey and development of an implementation RFP, will be completed in late 2021. Actual AMI implementation likely will take between two and four years after that, at an ultimate cost of approximately \$40-50 million. Completion of the project is subject to the availability of funds.

### **Collection of Past Due Invoices**

Like most other public utilities, the Board struggles to realize any revenue once a customer's invoice is significantly overdue. (See "WATER SERVICE CHARGES AND CUSTOMER BASE – Collection Procedures" herein.) The COVID-19 pandemic has compounded those struggles. Although losses in hotel and other commercial usage have been offset by increases in residential usage, the Board's total sum of overdue accounts – those active but more than 60 days past due – has increased by \$10,000,000 since June (as of December 15, 2020).

In an effort to ease the burden of outstanding balances on those customers impacted by COVID-19, the Board suspended its water shut-off and late fee policies. The suspension of these policies applies to all charges on the bill, including sanitation fees that the Board collects on behalf of the City. Under the suspension, anyone with a past-due balance will be automatically enrolled in a payment plan to help spread out overdue amounts across future months. Regardless of amount overdue, no residential customer will be required to pay more than \$100 per bill above their regular balance, and no commercial customer will be required to pay more than \$200 per bill above the regular balance. Certain customers who satisfy the obligations of the payment plan for an extended period will be eligible for a reduction of their remaining balance. Customers may pay off their outstanding balance or opt out of the payment plan at any time.

The Board is hopeful that the payment plan provides those customers who have long been delinquent an opportunity to move back into good standing.

# **Financial Controls**

The Board historically lacked adequate financial controls and current technology, often resulting in significant adjustments being made to funds and accounts long after the end of the fiscal year and requiring various audit findings to be included in the Board's Comprehensive Annual Financial Report each year. For example, the Board previously did not prepare certain account reconciliations and analyses on an on-going basis and did not adequately track construction in progress. In response, the Board instituted a corrective action plan and improved its policies, procedures and internal financial controls. Critical improvements include supervisory approval of all non-standard accounting entries and the assignment of additional employees to monitor financial controls.

#### **Fair Share Revenues**

In May 2019, in an effort to replenish funding for the Board, Mayor LaToya Cantrell, the Board, and the City were able to obtain \$50,000,000 in one-time funding to support various operations and capital needs of the Board. Additional, Fair Share Revenues were also secured as recurring funding to be dedicated to the Board and used as it periodically determines. Fair Share Revenues were anticipated to exceed \$20 million each year across all systems; however, the COVID-19 pandemic has drastically lowered those estimates, and the Board only received approximately \$6,500,000 in 2020. Even though the impact may not currently be as great as initially planned, Fair Share Revenues are, nonetheless, additional revenues to benefit the Board that were not available to the Board prior to 2019. The Board is not obligated to repay the Fair Share Revenues it receives.

#### **Financial Policies**

The Board has established various financial policies that guide the manner in which the Board acquires, controls, reports, and disburses financial assets. These policy statements cover financial planning, financial budgeting, debt management, and other areas. Some of the financial policies are more rigorous than those required by the General Bond Resolution; however, the financial policies are not part of the Bond Resolution or the contract with holders of the Series 2021 Bonds or the Outstanding Parity Bonds and can be amended at any time.

#### CONSULTING ENGINEER'S REPORT

Black & Veatch Corporation's findings and conclusions relating to the conditions of the Water System and its future operations are shown in the Consulting Engineer's Report attached hereto as APPENDIX "D".

# FINANCIAL CONSULTANT'S FEASIBILITY REPORT

Raftelis Financial Consultants, Inc.'s projections of operation and maintenance expenses are shown on the Financial Feasibility Report (See APPENDIX "E" attached hereto) and are categorized by the present system of accounts. Estimates of future expenses are based on analysis of past trends in Water System costs recognizing the existing City civil service pay plan and provide an allowance for continuing inflation. Included in the Financial Feasibility Letter is the opinion of the Financial Consultant regarding the adequacy of water service rates to produce revenues required for (i) operations and maintenance of the Water System and (ii) the payment of debt service on the Series 2021 Bonds, the Outstanding Parity Bonds, and future Outstanding Senior Parity Indebtedness. See APPENDIX "E" attached hereto.

## **DEBT STATEMENT**

#### **Short-Term Debt of the Board**

The Board has no outstanding short-term indebtedness other than normal accounts payable or as otherwise stated in this Official Statement.

#### Revenue Bonds of the Board

The City, acting by and through the Board, is authorized to issue Water Revenue Bonds secured by and payable from revenues received from the imposition of water charges, Sewerage Service Revenue Bonds secured by and payable from revenues received from the imposition of sewerage charges, and Drainage System Bonds secured by and payable from an ad valorem property tax levied for the operation

and maintenance of the Drainage System. The foregoing bonds are also payable from the amounts held on deposit in the funds and accounts established under the resolutions pursuant to which such bonds were or will be issued.

*Water Revenue Bonds*. The Prior Bonds are the only bonds of the Board currently outstanding secured by and payable from revenues received from the imposition of water service charges. See "SECURITY AND SOURCE OF PAYMENT" herein.

Sewerage Service Revenue Bonds. The Board has issued its Sewerage Service Revenue Bonds, Series 2011 (the "Series 2011 Sewerage Bonds"), Sewerage Service Revenue and Refunding Bonds, Series 2014 (the "Series 2014 Sewerage Bonds"), Sewerage Service Revenue Bonds, Series 2015 (the "Series 2015 Sewerage Bonds"), Sewerage Service Revenue Bond, Series 2019 (the "Series 2019 Sewerage Bond") and Sewerage Service Revenue Bonds, Series 2020A (the "Series 2020A Sewerage Bond") and Sewerage Service Revenue Bonds, Series 2020B (the "Series 2020B Sewerage Bonds" and, together with the Series 2011 Sewerage Bonds, Series 2014 Sewerage Bonds, Series 2015 Sewerage Bonds, Series 2019 Sewerage Bond and Series 2020A Sewerage Bond, the "Outstanding Sewer Bonds") are the only bonds of the Board currently outstanding secured by and payable from revenues received from the imposition of sewerage charges. As of January 1, 2021, \$5,601,000 of the Series 2011 Sewerage Bonds, \$87,705,000 of the Series 2014 Sewerage Bonds, \$10,000,000 of the Series 2015 Sewerage Bonds, \$10,000,000 of the Series 2019 Sewerage Bonds will be outstanding. The Board and the Board of Liquidation have approved the refunding of all or any portion of the Series 2014 Sewerage Bonds and the Series 2015 Sewerage Bonds.

The Outstanding Sewer Bonds will not be issued under or secured by the Bond Resolution or by any pledge of Net Revenues or the Funds created therein.

**Drainage System Bonds.** The Board has also issued its Drainage System Refunding Bonds, Series 2014, of which \$5,850,000 will be outstanding as of January 1, 2021. The Drainage System Refunding Bonds are secured solely by a pledge and dedication of the funds to be derived by the City from the levy and collection of a special ad valorem tax of 7.06 mills and were not issued under or secured by the Bond Resolution or by any pledge of Net Revenues or the Funds created therein.

Any such bonds issued for the benefit of the Water System shall be issued as provided in the General Bond Resolution. See "SECURITY AND SOURCE OF PAYMENT - Additional Bonds and Other Parity Senior Indebtedness" herein.

## **Hurricane-Related Borrowing of the Board**

As part of the recovery efforts following Hurricanes Katrina and Rita (See "INVESTMENT CONSIDERATIONS – Levees and Flood Protection" herein), the Board received special authorization to borrow funds from various sources for various purposes. The State issued \$200,000,000 of General Obligation Gulf Tax Credit Bonds, Series 2006-A and \$200,000,000 of General Obligation Match Bonds, Series 2006-B (the "State Bonds") and loaned the proceeds to various entities, including the Board, to assist in the payment of debt service coming due on the respective obligations of each entity. In addition, the Federal Government acting through FEMA pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (the "Stafford Act"), as amended, loaned the City and its component entities funds for current operations related to essential services, evidenced by one or more notes of such entities.

The Board borrowed \$77,465,247 of proceeds from the State Bonds (the "CEA GO Zone Indebtedness"). Of the CEA GO Zone Indebtedness, \$45,965,247 was used to make debt service payments

on Drainage System Special Tax Bonds, Sewerage Service Revenue Bonds, and Water Revenue Bonds that were due on December 1, 2006, June 1, 2007, and June 1, 2008, respectively. The CEA GO Zone Indebtedness attributable to the Water System is payable from surplus moneys held by the Board in the Water System Fund after the payment of all debt service obligations on any outstanding Senior Debt and Subordinate Debt. (See "SECURITY AND SOURCE OF PAYMENT - Special Funds and Application of Revenue" herein.) The CEA GO Zone Indebtedness was amended on July 11, 2019 to mature on January 15, 2031, and, as of January 20, 2021, the outstanding principal amount was \$40,044,839.22.

The Board also borrowed \$61,956,747 as a Special Community Disaster Loan under provisions of the Stafford Act. The proceeds of those loans were used by the Board to pay certain current operating expenses of the Board. Pursuant to Section 4502 of the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act of 2007, FEMA was given authority to forgive Stafford Act loans relating to Hurricane Katrina under certain circumstances. In 2013, FEMA forgave all remaining principal and accrued interest for the Special Community Disaster Loan.

#### INVESTMENT CONSIDERATIONS

The purchase of the Series 2021 Bonds involves certain investment risks which are discussed throughout this Official Statement, and each prospective investor should make an independent evaluation of all information presented in this Official Statement in order to make an informed investment decision. Particular attention should be given to the factors described below which, among others, could affect the payment of debt service on the Series 2021 Bonds.

# **COVID-19 Impacts**

In response to the COVID-19 pandemic, national and State emergency declarations are in effect, resulting in significant reductions in business, travel, and other economic activity. On March 11, 2020, Louisiana Governor John Bel Edwards issued Proclamation Number 25 JBE 2020 which declared a public health emergency and empowered the Governor's Office of Homeland Security and Emergency Preparedness and the Louisiana Secretary of the Department of Health and Hospitals and other State health officers to take all actions authorized under State law to respond to the public health emergency. On March 13, 2020, in Emergency Proclamation Number 27 JBE 2020, Gov. Edwards supplemented the measures with additional restrictions, suspensions of deadlines and regulations in order to protect the health and safety of the people of the State. On March 22, 2020, in Proclamation Number 33 JBE 2020, Gov. Edwards issued a Stay at Home order that, among other things, ordered the people of the State to stay at their homes unless taking essential trips or to travel to or from a place of employment, ordered some non-essential businesses to be closed, and placed limitations on other businesses that were allowed to remain open. This order was extended to April 30, 2020 in Proclamation Number 41 JBE 2020 and was further extended until May 15. 2020 in Proclamation Number 52 JBE 2020. Pursuant to Proclamation Number 58 JBE 2020, Gov. Edwards issued an order providing for a Phase I of recovery on May 15, 2020 which tracked the guidelines of the White House Coronavirus Task Force. The State began moving into Phase III of recovery on September 11, 2020 and remained in Phase III until November 24, 2020 when Gov. Edwards issued Proclamation Number 168 JBE 2020 directing the State to move back into a modified version of Phase II following an increase in cases across the State. All Proclamations, Executive Orders and Emergency Orders related to COVID-19 are available on the following website:

# https://gov.louisiana.gov/coronavirus/.

The City initially saw the highest number of cases in Louisiana and was one of the initial COVID-19 "hot spots" in the United States. As a result, the City enacted more stringent restrictions than much of

the rest of the State and moved into both Phase II and Phase III of recovery later than the rest of the State. The City instituted a tiered approach to Phase III recovery that began on October 3, 2020 and was in the third tier of Phase III until returning to a modified version of Phase II on November 25, 2020 in accordance with Gov. Edwards order in Proclamation Number 168 JBE 2020, and subsequently reenacting further restrictions on January 8, 2021.

Information regarding COVID-19 in the State, including information specific to the City, is available at the following website:

http://ldh.la.gov/Coronavirus/

Information regarding the State's efforts to reopen is available at the following websites:

https://gov.louisiana.gov/index.cfm/newsroom/detail/2488, and https://opensafely.la.gov/

See "MANAGEMENT'S DISCUSSION AND ANALYSIS – Reaction to COVID-19" herein for specific information concerning the impact of COVID-19 on the Board.

Because the effects of COVID-19 essentially began in March 2020 and the duration and the breadth of the effects of COVID-19 are not yet known, the total economic impact on the State, the Board and the City cannot be determined with certainty at this time. The Board and the City continue to assess the impacts of COVID-19 on their respective financial situations and adjust operations accordingly. Neither the Board nor the City can give any assurance regarding the ongoing and lasting impact of COVID-19 on their respective operations or finances, including the revenues pledged as security for the Series 2021 Bonds.

### **Levees and Flood Protection**

Coastal Louisiana, including the City, is susceptible to hurricanes wherein winds and flooding have from time to time caused significant damage, particularly in the case of Hurricane Katrina, which struck the Central Gulf Coast near New Orleans, Louisiana as a Category 3 hurricane on August 29, 2005.

Subsequent to Hurricane Katrina, the U.S. Army Corps of Engineers undertook a project consisting of the planning, design and construction of a flood protection system for the Metropolitan New Orleans Area. The flood protection system includes improved levees and floodwalls and temporary and permanent floodgates. Construction has been completed on several portions of the flood protection system improvements, and construction has commenced on others. Substantially all proposed flood protection system improvements have been completed at a total cost of approximately \$14 billion; however, concerns have been raised regarding the adequacy of the current flood protection system. The City can give no assurance that the current flood protection system will prevent flooding resulting from future significant weather events.

No assurance can be given that the proposed flood protection system improvements will prevent wind and flooding resulting from future significant weather events.

# Future Financial Performance - Ability to Finance Future Projects; Rate Increases

All financial and other information presented in this Official Statement has been provided by the Board from its records, except information expressly attributed to other sources. The presentation of

information, including tables of receipts from rates, charges, and other sources, is intended to show recent historical information, and is not intended to indicate future or continuing trends in the financial position or the affairs of the Board or the Water System except as otherwise indicated in this Official Statement. No representation is made that past experience, as might be shown by such financial and other information, will necessarily continue or be repeated.

The Board's ability to fulfill its various legal obligations and comply with other state and federal legal requirements depends, in part, on its ability to finance future construction either through external borrowing, funds on deposit, or funds raised through future rate increases. No assurance can be given that unforeseen factors may prevent such additional financings from being completed.

The Board's ability to raise rates is limited by the procedural requirement that any increase be approved by the Board of Liquidation and the New Orleans City Council. With the expiration of the recent rate increases through 2020, there can be no assurance that any subsequent rate increases will be approved. As a result, the Board, depending on its financial position at the time and several other factors, could find itself unable to generate sufficient revenues to fully operate the Water System and meet the Rate Covenant.

# Use of Water System Revenues to Provide Financial Support for the Sewerage System or Drainage System

In addition to the Water System, the Board also operates a Sewerage System and a Drainage System. Each system has its own source of revenue, and the Board operates each system as a distinct business enterprise; however, certain administrative expenses are allocated among the systems for accounting purposes. The Board may transfer Water System funds to either of the Sewerage System and/or the Drainage System; provided, however, that any such transfer may be made (i) only out of excess funds then held in the Water System Fund described herein (i.e., only after other deposits and transfers required to be made from Net Revenues have been made as required in the General Bond Resolution), and (ii) only to the extent such transfer is then permitted by applicable law.

#### **Regulatory Matters**

Although the operations of the Water System and the rates established for the Water System are not currently directly regulated by the State of Louisiana or the United States, such operations and rates can be adversely affected at any time by laws enacted by the Louisiana State Legislature or Congress or by rules, regulations, orders, or determinations by state or federal agencies that may have the effect of increasing expenses of the Water System or impairing the Board's ability to generate sufficient revenues to fully operate the Water System and meet the Rate Covenant.

## **Limitations on Remedies Available to Bondholders**

The remedies available to the owners of the Series 2021 Bonds upon an Event of Default under the Bond Resolution are in many respects dependent upon judicial actions which are often subject to discretion and delay. Under existing constitutional and statutory law and judicial decisions, including specifically in the United States Bankruptcy Code, 11 U.S.C. § 101, et seq. (the "Bankruptcy Code"), the remedies provided in the Bond Resolution may not be readily available or may be limited. The various legal opinions delivered concurrently with the delivery of the Series 2021 Bonds will be qualified as to the enforceability of the various legal instruments by limitations imposed by general principles of equity and by bankruptcy, reorganization, insolvency or other similar laws affecting the rights of creditors generally.

The enforceability of the rights and remedies of the owners of the Series 2021 Bonds, and the obligations incurred by the Issuer in issuing the Series 2021 Bonds, are subject to the Bankruptcy Code and applicable bankruptcy, insolvency, reorganization, moratorium, or similar laws relating to or affecting the enforcement of creditors' rights generally, now or hereafter in effect to the extent constitutionally applicable; equity principles which may limit the specific enforcement under Louisiana law of certain remedies; the exercise by the United States of America of the powers delegated to it by the federal Constitution; and the exercise of the sovereign police powers of the State of Louisiana or its governmental bodies. Consistent with the Contracts Clauses of the Louisiana and United States Constitutions, in a bankruptcy proceeding or due to the exercise of powers by the federal government or the government of the State of Louisiana, bondowners could be subject to judicial discretion and the interpretation of their rights in bankruptcy or otherwise, which consequently may entail risks of delay, limitation, or modification of their rights. Under current Louisiana law, no political subdivision, including the Issuer, may file for protection under Chapter 9 of the Bankruptcy Code unless such filing is approved by the Louisiana State Bond Commission and the Governor and Attorney General of Louisiana. Further, no political subdivision, after filing for bankruptcy protection, may carry out a plan of readjustment of debts approved by the bankruptcy court until such plan is approved by the Louisiana State Bond Commission and the Governor and Attorney General of Louisiana.

The obligations of the Issuer and the Board under the Bond Resolution may be secured on a parity with other obligations of the Issuer and the Board so that any proceeds that might be derived from the exercise of remedies would be required to be shared among the owners of the Series 2021 Bonds and the holders of any additional parity bonds.

For the foregoing reasons, in a bankruptcy context, the pledge of the Net Revenues by the Issuer and the Board to secure the obligations with respect to the Series 2021 Bonds may be ineffective as to certain revenues or under certain circumstances.

# Cybersecurity

The City, the Board of Liquidation and the Board are dependent on electronic information technology systems to deliver high quality, coordinated and cost-efficient services. These systems may contain sensitive information or support critical operational functions which may be valued for unauthorized purposes. As a result, the electronic systems and networks of the City, the Board of Liquidation and the Board may be targets of cyberattack. The City, the Board of Liquidation and the Board have taken, and continue to take, measures to protect their respective information technology systems, and the private, confidential information that those systems may contain, against cyberattack. While the City, the Board of Liquidation and the Board employ information technology professionals and utilize operational safeguards that are tested periodically, no assurance can be given that such measures will protect the City, the Board of Liquidation and the Board against all cybersecurity threats or attacks.

On December 13, 2019, the City was the victim of a cyberattack. The City did not pay any ransom, and no access to financial data or banking activity was compromised during the attack. Although this particular cyberattack impacted the City's electronic capabilities for several weeks, workforce and operational interruptions have since been resolved.

The Board's computer and technology systems are separate from the City's, so the Board was not impacted by the cyberattack on the City described above. The Board periodically tests its own systems for weaknesses and addresses them promptly upon discovery.

# **Failure to Provide Ongoing Disclosure**

The failure of the Issuer to comply with the continuing disclosure certificate described herein may adversely affect the transferability and liquidity of the Series 2021 Bonds and their market price. See "CONTINUING DISCLOSURE" herein.

# **Limited Secondary Market**

There can be no guarantee that there will be a secondary market for the Series 2021 Bonds or, if a secondary market exists, that any Series 2021 Bonds can be sold for a particular price. Occasionally, because of general market conditions, lack of current information, adverse history, or economic prospects connected with a particular issue, secondary marketing practices in connection with a particular issue are suspended or terminated. Additionally, prices of issues for which a market is being made will depend upon the then-prevailing circumstances. Such prices could be substantially different from the original purchase price.

# **Book-Entry**

Persons who purchase Series 2021 Bonds through DTC Participants become creditors of the DTC Participant with respect to the Series 2021 Bonds. Records of the investors' holdings are maintained only by the DTC Participant and the investor. In the event of the insolvency of the DTC Participant, the investor would be required to look to the DTC Participant's estate and to any insurance maintained by the DTC Participant, to make good the investor's loss. Neither the Issuer nor the purchaser are responsible for failures to act by, or insolvencies of, the Securities Depository or any DTC Participant. See Appendix "I" attached hereto.

# **Future Changes in Laws**

The information presented in this Official Statement is based on the laws and regulations of the United States of America and the State and related court and administrative law decisions in effect as of the date of this Official Statement (collectively, the "Laws"). In addition, the opinions delivered in connection with the issuance of the Series 2021 Bonds are based on the Laws. No assurance can be given as to the impact, if any, future events, regulations, legislation, court decisions or administrative decisions may have with respect to the Laws or that any or all of the Laws will remain in effect during the entire term of the Series 2021 Bonds.

## **Forward-Looking Statements**

This Official Statement contains statements relating to future results that are "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995. When used in this Official Statement, the words "estimate," "intend," "expect" and similar expressions identify forward-looking statements. Any forward-looking statement is subject to uncertainty and risks that could cause actual results to differ, possibly materially, from those contemplated in such forward-looking statements. Inevitably, some assumptions used to develop forward-looking statements will not be realized or unanticipated events and circumstances may occur. Therefore, investors should be aware that there are likely to be differences between forward-looking statements and actual results; those differences could be material.

INVESTING IN THE SERIES 2021 BONDS INVOLVES CERTAIN RISKS. POTENTIAL INVESTORS IN THE SERIES 2021 BONDS ARE RESPONSIBLE FOR CONDUCTING AN INDEPENDENT INVESTIGATION OF MATTERS RELATING TO THE FINANCIAL ASPECTS OF THE SERIES 2021

BONDS, THE WATER SYSTEM, THE ISSUER, THE BOARD AND THE SECURITY FOR THE SERIES 2021 BONDS TO DETERMINE IF AN INVESTMENT IN THE SERIES 2021 BONDS, AND THE RISKS ASSOCIATED THEREWITH, IS CONSISTENT WITH THEIR INVESTMENT OBJECTIVES. POTENTIAL INVESTORS SHOULD NOT RELY ON ANY PARTY TO THE TRANSACTION WITH RESPECT TO THE INVESTIGATION OF ANY SUCH MATTERS. PROSPECTIVE PURCHASERS SHOULD CONFER WITH THEIR OWN LEGAL AND FINANCIAL ADVISORS BEFORE CONSIDERING A PURCHASE OF THE SERIES 2021 BONDS.

THIS OFFICIAL STATEMENT HAS BEEN PREPARED IN CONNECTION WITH THE INITIAL OFFERING AND SALE OF THE SERIES 2021 BONDS TO THE PURCHASERS ON THE DATE HEREOF AND IS NOT INTENDED FOR USE IN CONNECTION WITH ANY SUBSEQUENT SALE, REOFFERING OR REMARKETING OF THE SERIES 2021 BONDS. SUBSEQUENT PURCHASERS MUST THEREFORE RELY ON THEIR OWN EXAMINATION OF THE OFFERING, INCLUDING THE MERITS AND THE RISKS INVOLVED.

#### **BOND INSURANCE**

# **Bond Insurance Policy**

Concurrently with the issuance of the Series 2021 Bonds, Assured Guaranty Municipal Corp. ("AGM") will issue its Municipal Bond Insurance Policy (the "Policy") for the Series 2021 Bonds. The Policy guarantees the scheduled payment of principal of and interest on the Series 2021 Bonds when due as set forth in the form of the Policy included as an appendix to this Official Statement.

The 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 international public finance (including infrastructure) and structured finance markets and, as of October 1, 2019, asset management services. 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 October 29, 2020, KBRA announced it had 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.

On July 16, 2020, S&P announced it had 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 13, 2019, Moody's announced it had affirmed AGM's insurance financial strength rating of "A2" (stable outlook). AGM can give no assurance as to any further ratings action that Moody's 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, 2019.

# Capitalization of AGM. At September 30, 2020:

- The policyholders' surplus of AGM was approximately \$2,671 million.
- The contingency reserves of AGM and its indirect subsidiary Municipal Assurance Corp. ("MAC") (as described below) were approximately \$1,042 million. Such amount includes 100% of AGM's contingency reserve and 60.7% of MAC's contingency reserve.
- The net unearned premium reserves and net deferred ceding commission income of AGM and its subsidiaries (as described below) were approximately \$2,111 million. Such amount includes (i) 100% of the net unearned premium reserve and deferred ceding commission income of AGM, (ii) the net unearned premium reserves and net deferred ceding commissions of AGM's wholly owned subsidiaries Assured Guaranty (Europe) plc ("AGE UK") and Assured Guaranty (Europe) SA ("AGE SA"), and (iii) 60.7% of the net unearned premium reserve of MAC.

The policyholders' surplus of AGM and the contingency reserves, net unearned premium reserves and deferred ceding commission income of AGM and MAC were determined in accordance with statutory accounting principles. The net unearned premium reserves and net deferred ceding commissions of AGE UK and AGE SA were determined in accordance with accounting principles generally accepted in the United States of America.

*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, 2019 (filed by AGL with the SEC on February 28, 2020);
- (ii) the Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2020 (filed by AGL with the SEC on May 8, 2020);
- (iii) the Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2020 (filed by AGL with the SEC on August 7, 2020); and

(iv) the Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2020 (filed by AGL with the SEC on November 6, 2020).

All 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 Insured 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 <a href="http://www.assuredguaranty.com">http://www.assuredguaranty.com</a>, 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 2021 Bonds or the advisability of investing in the Series 2021 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 heading "BOND INSURANCE" herein.

# **CLEARING SYSTEMS**

This section describes how ownership of the Series 2021 Bonds is to be transferred and how the principal of and interest on the Series 2021 Bonds are to be paid to and credited by DTC while the Series 2021 Bonds are registered in its nominee's name.

The information in this section concerning DTC, Euroclear Bank SA/NV as operator of the Euroclear System ("Euroclear") and Clearstream Banking, S.A., Luxembourg ("Clearstream Banking") (DTC, Euroclear and Clearstream Banking together, the "Clearing Systems"), and DTC's book-entry-only system has been provided by DTC, Euroclear and Clearstream Banking for use in disclosure documents such as this Official Statement.

DTC will act as the initial securities depository for the Series 2021 Bonds. Euroclear and Clearstream Banking are participants of DTC and facilitate the clearance and settlement of securities transactions by electronic book-entry transfer between their respective account holders.

The information set forth below is subject to any change in or reinterpretation of the rules, regulations and procedures of the Clearing Systems currently in effect and the City, the Board and the Board of Liquidation expressly disclaim any responsibility to update this Official Statement to reflect any such changes. The information herein concerning the Clearing Systems has been obtained from sources that the City, the Board and the Board of Liquidation believe to be reliable, but none of the City, the Board

and the Board of Liquidation nor the Underwriters take any responsibility for the accuracy or completeness of the information set forth herein. Investors wishing to use the facilities of any of the Clearing Systems are advised to confirm the continued applicability of the rules, regulations and procedures of the relevant Clearing System. The City, the Board and the Board of Liquidation and the Underwriters will not have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the Series 2021 Bonds held through the facilities of any Clearing System or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

The City, the Board and the Board of Liquidation cannot and do not give any assurance that (1) DTC will distribute payments of debt service on the Series 2021 Bonds, or redemption or other notices, to participants of the Clearing Systems ("Participants") (2) Participants or others will distribute debt service payments paid to DTC or its nominee (as the registered owner of the Series 2021 Bonds), or redemption or other notices, to the Beneficial Owners, or that they will do so on a timely basis, or (3) DTC or the other Clearing Systems will serve and act in the manner described in this Official Statement. The current rules applicable to DTC are on file with the Securities and Exchange Commission, and the current procedures of DTC to be followed in dealing with DTC Participants (hereinafter defined) are on file with DTC.

# **DTC Book-Entry-Only System**

## Clearing Systems

DTC will act initially as Securities Depository for the Series 2021 Bonds. The Series 2021 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 the Series 2021 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, as amended. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company of 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 Series 2021 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2021 Bonds on DTC's records. The ownership

interest of each actual purchaser of each Series 2021 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 beneficial ownership interests in the Series 2021 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 beneficial ownership interests in Series 2021 Bonds, except in the event that use of the book-entry system for the Series 2021 Bonds is discontinued.

To facilitate subsequent transfers, all Series 2021 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 2021 Bonds with DTC and their registration in the name of Cede & Co., or such other DTC nominee, does not affect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2021 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2021 Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Series 2021 Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series 2021 Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Series 2021 Bond documents. For example, Beneficial Owners of Series 2021 Bonds may wish to ascertain that the nominee holding the Series 2021 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 Paying Agent and request that copies of notices be provided directly to them.

Redemption notices will be sent to DTC. If less than all of the Series 2021 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, unless other arrangements are made between the City, the Board and the Board of Liquidation and DTC.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Series 2021 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 City, the Board and the Board of Liquidation 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 Series 2021 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

All payments on the Series 2021 Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the City, the Board and the Board of Liquidation or the Paying Agent, on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Paying Agent, or the City, the Board or the Board of Liquidation, subject to any statutory or regulatory

requirements as may be in effect from time to time. Payment of principal, and interest payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the City, the Board, the Board of Liquidation or the Paying Agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the Series 2021 Bonds at any time by giving reasonable notice to the City, the Board, the Board of Liquidation or the Paying Agent. Under such circumstances, in the event that a successor Securities Depository is not obtained, Series 2021 Bond certificates are required to be printed and delivered.

The City, the Board and the Board of Liquidation may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor Securities Depository). In that event, Series 2021 Bonds will be printed and delivered in accordance with the Resolution.

In reading this Official Statement it should be understood that while the Series 2021 Bonds are in the Book-Entry-Only System, references in other sections of this Official Statement to registered owners should be read to include the person for which the Participant acquires an interest in the Series 2021 Bonds, but (i) all rights of ownership must be exercised through DTC and the Book-Entry-Only System, and (ii) except as described above, notices that are to be given to registered owners under the Resolution will be given only to DTC.

# **Euroclear and Clearstream Banking**

Euroclear and Clearstream Banking have advised as follows:

Euroclear and Clearstream Banking each hold securities for their customers and facilitate the clearance and settlement of securities transactions by electronic book-entry transfer between their respective account holders. Euroclear and Clearstream Banking provide various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream Banking also deal with domestic securities markets in several countries through established depositary and custodial relationships. Euroclear and Clearstream Banking have established an electronic bridge between their two systems across which their respective participants may settle trades with each other.

Euroclear and Clearstream Banking customers are worldwide financial institutions, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. Indirect access to Euroclear and Clearstream Banking is available to other institutions that clear through or maintain a custodial relationship with an account holder of either system, either directly or indirectly.

# Clearing and Settlement Procedures

Any Series 2021 Bonds sold in offshore transactions will be initially issued to investors through the book-entry facilities of DTC, for the account of its participants, including but not limited to Euroclear and Clearstream Banking. If the investors are participants in Clearstream Banking and Euroclear in Europe, or indirectly through organizations that are participants in the Clearing Systems, Clearstream Banking and Euroclear will hold omnibus positions on behalf of their participants through customers' securities accounts in Clearstream Banking's and Euroclear's names on the books of their respective depositories. In all cases, the record holder of the Series 2021 Bonds will be DTC's nominee and not Euroclear or Clearstream Banking. The depositories, in turn, will hold positions in customers' securities accounts in the depositories'

names on the books of DTC. Because of time zone differences, the securities account of a Clearstream Banking or Euroclear participant as a result of a transaction with a participant, other than a depository holding on behalf of Clearstream Banking or Euroclear, will be credited during the securities settlement processing day, which must be a business day for Clearstream Banking or Euroclear, as the case may be, immediately following the DTC settlement date. These credits or any transactions in the securities settled during the processing will be reported to the relevant Euroclear participant or Clearstream Banking participant on that business day. Cash received in Clearstream Banking or Euroclear as a result of sales of securities by or through a Clearstream Banking participant or Euroclear participant to a DTC Participant, other than the depository for Clearstream Banking or Euroclear, will be received with value on the DTC settlement date but will be available in the relevant Clearstream Banking or Euroclear cash account only as of the business day following settlement in DTC.

Transfers between participants will occur in accordance with DTC rules. Transfers between Clearstream Banking participants or Euroclear participants will occur in accordance with their respective rules and operating procedures. Cross-market transfers between persons holding directly or indirectly through DTC, on the one hand, and directly or indirectly through Clearstream Banking participants or Euroclear participants, on the other, will be effected in DTC in accordance with DTC rules on behalf of the relevant European international clearing system by the relevant depositories; however, cross-market transactions will require delivery of instructions to the relevant European international clearing system by the counterparty in the system in accordance with its rules and procedures and within its established deadlines in European time. The relevant European international clearing system will, if the transaction meets its settlement requirements, deliver instructions to its depository to take action to effect final settlement on its behalf by delivering or receiving securities in DTC, and making or receiving payment in accordance with normal procedures for same day funds settlement applicable to DTC. Clearstream Banking participants or Euroclear participants may not deliver instructions directly to the depositories.

The City, the Board and the Board of Liquidation will not impose any fees in respect of holding the Series 2021 Bonds; however, holders of book-entry interests in the Series 2021 Bonds may incur fees normally payable in respect of the maintenance and operation of accounts in the Clearing Systems.

# **Initial Settlement**

Interests in the Series 2021 Bonds will be in uncertified book-entry form. Purchasers electing to hold book-entry interests in the Series 2021 Bonds through Euroclear and Clearstream Banking accounts will follow the settlement procedures applicable thereto and applicable to DTC. Book-entry interests in the Series 2021 Bonds will be credited by DTC to Euroclear and Clearstream Banking participants' securities clearance accounts on the business day following the date of delivery of the Series 2021 Bonds against payment (value as on the date of delivery of the Series 2021 Bonds). DTC participants acting on behalf of purchasers electing to hold book-entry interests in the Series 2021 Bonds through DTC will follow the delivery practices applicable to securities eligible for DTC's Same Day Funds Settlement system. DTC participants' securities accounts will be credited with book-entry interests in the Series 2021 Bonds following confirmation of receipt of payment to the Board of Liquidation on the date of delivery of the Series 2021 Bonds.

#### Secondary Market Trading

Secondary market trades in the Series 2021 Bonds will be settled by transfer of title to book-entry interests in the Clearing Systems. Title to such book-entry interests will pass by registration of the transfer within the records of Euroclear, Clearstream Banking or DTC, as the case may be, in accordance with their respective procedures. Book-entry interests in the Series 2021 Bonds may be transferred within Euroclear and within Clearstream Banking and between Euroclear and Clearstream Banking in accordance with

procedures established for these purposes by Euroclear and Clearstream Banking. Book-entry interests in the Series 2021 Bonds may be transferred within DTC in accordance with procedures established for this purpose by DTC. Transfer of book-entry interests in the Series 2021 Bonds between Euroclear or Clearstream Banking and DTC shall be effected in accordance with procedures established for this purpose by Euroclear, Clearstream Banking and DTC.

### **Special Timing Considerations**

Investors should be aware that investors will only be able to make and receive deliveries, payments and other communications involving the Series 2021 Bonds through Euroclear or Clearstream Banking on days when those systems are open for business. In addition, because of time-zone differences, there may be complications with completing transactions involving Clearstream Banking and/or Euroclear on the same business day as in the United States. U.S. investors who wish to transfer their interests in the Series 2021 Bonds, or to receive or make a payment or delivery of Series 2021 Bonds, on a particular day, may find that the transactions will not be performed until the next business day in Luxembourg if Clearstream Banking is used, or Brussels if Euroclear is used.

### **Clearing Information**

The City, the Board and the Board of Liquidation and the Underwriters expect that the Series 2021 Bonds will be accepted for clearance through the facilities of Euroclear and Clearstream Banking. The international securities identification number, common code and CUSIP number for the Series 2021 Bonds are set out on the inside cover page of this Official Statement.

### General

None of Euroclear, Clearstream Banking or DTC is under any obligation to perform or continue to perform the procedures referred to above, and such procedures may be discontinued at any time.

Neither the City, the Board, the Board of Liquidation, the Underwriters nor any of their agents will have any responsibility for the performance by Euroclear, Clearstream Banking or DTC or their respective direct or indirect participants or account holders of their respective obligations under the rules and procedures governing their operations or the arrangements referred to above.

### Limitations

For so long as the Series 2021 Bonds are registered in the name of DTC or its nominee, Cede & Co., the City, the Board, the Board of Liquidation, and the Paying Agent will recognize only DTC or its nominee, Cede & Co., as the registered owner of the Series 2021 Bonds for all purposes, including payments, notices and voting. So long as Cede & Co. is the registered owner of the Series 2021 Bonds, references in this Official Statement to registered owners of the Series 2021 Bonds shall mean Cede & Co. and shall not mean the Beneficial Owners of the Series 2021 Bonds.

Because DTC is treated as the owner of the Series 2021 Bonds for substantially all purposes, Beneficial Owners may have a restricted ability to influence in a timely fashion remedial action or the giving or withholding of requested consents or other directions. In addition, because the identity of Beneficial Owners is unknown to the City, the Board, the Board of Liquidation, or DTC, it may be difficult to transmit information of potential interest to Beneficial Owners in an effective and timely manner. Beneficial Owners should make appropriate arrangements with their broker or dealer regarding distribution of information regarding the Series 2021 Bonds that may be transmitted by or through DTC.

The City, the Board, and the Board of Liquidation will have no responsibility or obligation with respect to:

- the accuracy of the records of DTC, its nominee or any Direct Participant or Indirect Participant with respect to any Beneficial Ownership interest in any Series 2021 Bonds;
- the delivery to any Direct Participant or Indirect Participant or any other person, other than a registered owner as shown in the bond register kept by the Paying Agent, of any notice with respect to any Series 2021 Bonds including, without limitation, any notice of redemption with respect to any Series 2021 Bonds;
- the payment to any Direct Participant or Indirect Participant or any other person, other than a registered owner as shown in the bond register kept by the Paying Agent, of any amount with respect to the principal of, premium, if any, or interest on, any Series 2021 Bonds; or
- any consent given by DTC or its nominee as registered owner.

Prior to any discontinuation of the book entry only system hereinabove described, the City, the Board, the Board of Liquidation, and the Paying Agent may treat Cede & Co. (or such other nominee of DTC) as, and deem Cede & Co. (or such other nominee) to be, the absolute registered owner of the Series 2021 Bonds for all purposes whatsoever, including, without limitation:

- the payment of principal, premium, if any, and interest on the Series 2021 Bonds;
- giving notices of redemption and other matters with respect to the Series 2021 Bonds;
- registering transfers with respect to the Series 2021 Bonds; and
- the selection of Series 2021 Bonds for redemption.

### TAX MATTERS

### **Federal Taxes**

In the opinion of Co-Bond Counsel, interest on the Series 2021 Bonds is NOT excludable from gross income for Federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"). Thus, owners of the Series 2021 Bonds generally must include interest on the Series 2021 Bonds in gross income for federal income tax purposes. See APPENDIX "G" – Proposed Form of Legal Opinion of Co-Bond Counsel attached hereto.

### **State Taxes**

The opinion of Co-Bond Counsel will state that pursuant to the Act, the Series 2021 Bonds are exempt from all taxation in the State for state, parish, municipal or other local purposes. See APPENDIX "G" – Proposed Form of Legal Opinion of Co-Bond Counsel attached hereto. Each prospective purchaser of the Series 2021 Bonds should consult his or her own tax advisor as to the status of interest on the Series 2021 Bonds under the tax laws of any state other than the State.

### General

Other than as stated in the two preceding paragraphs, Co-Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or other aspects of the Series 2021 Bonds. The following is a summary of certain anticipated United States federal income tax consequences of the purchase, ownership and disposition of the Series 2021 Bonds by those that acquire the Series 2021 Bonds in the initial offering. The summary is based upon the provisions of the Code, the regulations promulgated thereunder and the judicial and administrative rulings and decisions now in effect, all of which are subject

to change. The summary generally addresses "U.S. holders" (as defined below) who will hold the Series 2021 Bonds as capital assets (generally, property held for investment) within the meaning of Section 1221 of the Code and does not purport to address all aspects of federal income taxation that may affect particular investors in light of their individual circumstances or certain types of investors subject to special treatment under the federal income tax laws, including but not limited to financial institutions, insurance companies, dealers in securities or currencies, persons holding such Series 2021 Bonds as a hedge against currency risks or as a position in a "straddle" for tax purposes, or persons whose functional currency is not the United States dollar. Potential purchasers of the Series 2021 Bonds should consult their own tax advisors in determining the federal, state or local tax consequences to them of the purchase, holding and disposition of the Series 2021 Bonds. Prospective investors should note that no rulings have been or will be sought from the Internal Revenue Service with respect to any of the federal income tax consequences discussed below, and no assurance can be given that the Internal Revenue Service will not take contrary positions.

As used herein, a "U.S. holder" is a "U.S. person" that is beneficial owner of a Series 2021 Bond. A "non-U.S. holder" is a holder (or beneficial owner) of a Series 2021 Bond that is not a U.S. person. For these purposes, a "U.S. Person" is a citizen or resident of the United States, a corporation or partnership created or organized in or under the laws of the United States or any political subdivision thereof (except, in the case of a partnership, to the extent otherwise provided in the Treasury Regulations), an estate the income of which is subject to United States federal income taxation regardless of its source or a trust if (i) a United States court is able to exercise primary supervision over the trust's administration and (ii) one or more United States persons have the authority to control all of the trust's substantial decisions.

### Sale or Redemption of the Series 2021 Bonds

A bondowner's tax basis for a Series 2021 Bond is the price such owner pays for the Series 2021 Bond plus the amount of any original issue discount and market discount previously included in income, reduced on account of any payments received (other than "qualified periodic interest" payments) and any amortized bond premium. Gain or loss recognized on a sale, exchange or redemption of a Series 2021 Bond, measured by the difference between the amount realized and the Series 2021 Bond basis as so adjusted, will generally give rise to capital gain or loss if the Series 2021 Bond is held as a capital asset.

A purchaser (other than a person who purchases a Series 2021 Bond upon issuance at the issue price) who buys a Series 2021 Bond at a discount from its principal amount (or its adjusted issue price if issued with original issue discount greater than a specified de minimis amount) will be subject to the market discount rules of the Code. In general, the market discount rules of the Code treat principal payments and gain on disposition of a debt instrument as ordinary income to the extent of accrued market discount. Each potential investor should consult his tax advisor concerning the application of the market discount rules to the Series 2021 Bonds.

### **Defeasance**

The legal defeasance of the Series 2021 Bonds may result in a deemed sale or exchange of such bonds under certain circumstances. Owners of such Series 2021 Bonds should consult their tax advisors as to the federal income tax consequences of such a defeasance.

### **Reporting Requirement**

In general, information reporting requirements will apply to certain payments of principal and interest paid on the Series 2021 Bonds and to the proceeds paid on the sale of the Series 2021 Bonds, other than certain exempt recipients (such as corporations and foreign entities).

### **Backup Withholding**

Certain purchasers may be subject to backup withholding at the application rate determined by statute with respect to interest paid with respect to the Series 2021 Bonds, if the purchasers, upon issuance, fail to supply the Paying Agent or their brokers with their taxpayer identification numbers, furnish incorrect taxpayer identification numbers, fail to report interest, dividends or other "reportable payments" (as defined in the Code) properly, or, under certain circumstances, fail to provide a certified statement, under penalty of perjury, that they are not subject to backup withholding. Owners of the Series 2021 Bonds should consult their tax advisors as to their qualification for exemption from backup withholding and the procedure for obtaining the exemption.

### **Legislation and Guidance Relating to Foreign Accounts**

The Foreign Account Tax Compliance Act, or FATCA, generally imposes a U.S. federal withholding tax of 30% on interest income on and the gross proceeds from a sale or other disposition of the Series 2021 Bonds paid to a "foreign financial institution" (as specifically defined under these rules), unless otherwise provided by the Treasury Secretary or such institution enters into an agreement with the U.S. government to, among other things, withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding the U.S. account holders of such institution (which include certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or otherwise establishes an exemption. FATCA also generally imposes a U.S. federal withholding tax of 30% on interest income on and the gross proceeds from a sale or other disposition of the Series 2021 Bonds paid to a "non-financial foreign entity" (as specifically defined for purposes of these rules) unless otherwise provided by the Treasury Secretary or such entity provides the withholding agent with a certification identifying certain substantial direct and indirect U.S. owners of the entity, certifies that there are none or otherwise establishes an exemption. The withholding provisions under FATCA generally apply to interest income on the Series 2021 Bonds. The Treasury Secretary has issued proposed regulations providing that the withholding provisions under FATCA do not apply with respect to the gross proceeds from a sale or other disposition of the Series 2021 Bonds, which may be relied upon by taxpayers until final regulations are issued. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this paragraph. Prospective investors are encouraged to consult with their tax advisors regarding the possible implications of FATCA on their investment in the Series 2021 Bonds.

### **Changes in Federal and State Tax Law**

From time to time, there are legislative proposals in Congress and in the states that, if enacted, could alter or amend the federal and state tax matters referred to herein. In addition, such legislation (whether currently proposed, proposed in the future or enacted) could affect the market value or marketability of the Series 2021 Bonds. Future Congressional proposals could also affect the Series 2021 Bonds, even if never enacted. It cannot be predicted whether or in what form any such proposals might ultimately be enacted or whether if enacted such proposals would apply to bonds issued prior to enactment. In addition, regulatory actions are from time to time announced or proposed and litigation is threatened or commenced which, if implemented or concluded in a particular manner, could adversely affect the market value of the Series 2021 Bonds. It cannot be predicted whether any such regulatory action will be implemented, how any particular litigation or judicial action will be resolved, or whether the Series 2021 Bonds or the market value thereof would be impacted thereby. Prospective purchasers of the Series 2021 Bonds should consult their tax or investment advisors regarding any pending or proposed legislation, regulatory initiatives or litigation.

The opinions expressed by Co-Bond Counsel are based upon existing legislation and regulations as interpreted by relevant judicial and regulatory authorities as of the date of issuance and delivery of the Series 2021 Bonds, and Co-Bond Counsel have expressed no opinion as of any date subsequent thereto or with respect to any pending or proposed federal or state tax legislation, regulations or litigation.

THE FOREGOING DISCUSSION OF CERTAIN FEDERAL AND STATE INCOME TAX CONSEQUENCES IS PROVIDED FOR GENERAL INFORMATION ONLY. INVESTORS SHOULD CONSULT THEIR TAX OR INVESTMENT ADVISORS AS TO THE TAX CONSEQUENCES TO THEM IN LIGHT OF THEIR OWN PARTICULAR INCOME TAX POSITION, OF ACQUIRING, HOLDING OR DISPOSING OF THE SERIES 2021 BONDS.

### LITIGATION

There is not now pending, or to the best of the Board's knowledge, threatened any litigation restraining or enjoining the issuance or delivery of the Series 2021 Bonds, the proceedings and authority under which they are being issued, nor is the creation, organization, or existence of the Board being contested. Nor is there any litigation pending or, to the best of the Board's knowledge, threatened which (i) in any manner questions the right of the Board to operate the Water System or its right to conduct its activities in accordance with the provisions of the Act and the General Bond Resolution, or (ii) if determined adversely to the Board, would have a material adverse impact on the financial condition of the Board.

The Board is subject to a variety of suits and proceedings arising out of its ordinary course of operations, some of which may be adjudicated adversely to the Board. Any such litigation currently pending is of a routine nature and does not affect the right of the Board to conduct its business or the validity of its obligations.

### **VERIFICATION OF COMPUTATIONS**

The arithmetical accuracy of certain computations included in the schedules provided by the Co-Financial Advisors (as defined below) on behalf of the Issuer relating to (a) computation of anticipated receipts of principal and interest on the government obligations referred to under "PLAN OF REFUNDING" and the anticipated payments of principal and interest to redeem the Refunded Bonds, and (b) computation of the yields on the Series 2021 Bonds and the Defeasance Obligations was examined by The Arbitrage Group, Inc., Buhl, Alabama (the "Verification Agent"). Such computations were based solely upon assumptions and information supplied by the Underwriters on behalf of the Issuer. The Verification Agent has restricted its procedures to examining the arithmetical accuracy of certain computations and has not made any study or evaluation of the assumptions and information upon which the computations are based and, accordingly, has not expressed an opinion on the data used, the reasonableness of the assumptions, or the achievability of future events.

### UNDERWRITING

The Series 2021 Bonds are being purchased by J.P. Morgan Securities LLC (the "Representative") on behalf of itself and as the Representative of the other Underwriters, at a purchase price of \$194,011,623.74 (representing the principal amount of the Series 2021 Bonds, less underwriting discount of \$288,376.26).

The Bond Purchase Agreement (the "Purchase Agreement") between the Representative, on behalf of itself and the other Underwriters, and the Issuer, acting for and on behalf of the Board, and through the

Board of Liquidation, provides that the Underwriters will purchase all of the Series 2021 Bonds if any are purchased. The obligation of the Underwriters to accept delivery of the Series 2021 Bonds is subject to various conditions contained in the Purchase Agreement.

The Underwriters intend to offer the Series 2021 Bonds to the public initially at the offering prices set forth on the inside cover page of this Official Statement, which may subsequently change without any requirement of prior notice. The Underwriters reserve the right to join with dealers and other underwriters in offering the Series 2021 Bonds to the public. The Underwriters may offer and sell the Series 2021 Bonds to certain dealers at prices lower than the public offering price. In connection with this offering, the Underwriters may overallot or effect transactions which stabilize or maintain the market price of the Series 2021 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 do not guarantee a secondary market for the Series 2021 Bonds and are not obligated to make any such market in the Series 2021 Bonds. No assurance can be made that such a market will develop or continue. Consequently, investors may not be able to resell Series 2021 Bonds should they need or wish to do so for emergency or other purposes.

J.P. Morgan Securities LLC ("JPMS"), one of the Underwriters of the Series 2021 Bonds, has entered into negotiated dealer agreements (each, a "Dealer Agreement") with each 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 (if applicable to this transaction), each of CS&Co. and LPL may purchase Series 2021 Bonds from JPMS at the original issue price less a negotiated portion of the selling concession applicable to any Series 2021 Bonds that such firm sells.

BofA Securities, Inc., one of the Underwriters of the Series 2021 Bonds, has entered into a distribution agreement with its affiliate Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S"). As part of this arrangement, BofA Securities, Inc. may distribute securities to MLPF&S, which may in turn distribute such securities to investors through the financial advisor network of MLPF&S. As part of this arrangement, BofA Securities, Inc. may compensate MLPF&S as a dealer for their selling efforts with respect to the Series 2021 Bonds.

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 Finance 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 Finance Group ("WFBNA"), one of the Underwriters of the Series 2021 Bonds, has entered into an agreement (the "WFA Distribution Agreement") with its affiliate, Wells Fargo Clearing Services, LLC (which uses the trade name "Wells Fargo Advisors") ("WFA"), for the distribution of certain municipal securities offerings, including the Series 2021 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 2021 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 2021 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.

The Underwriters and their 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 affiliates have, from time to time, performed, and may in the future perform, various investment banking services for the Issuer for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (other 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 Issuer.

The Underwriters are not acting as municipal advisor to the Issuer, the Board or the Board of Liquidation in connection with the offer and sale of the Series 2021 Bonds.

### **LEGAL MATTERS**

The joint approving opinion of Co-Bond Counsel will be given with respect to the Series 2021 Bonds. The approving opinion of Co-Bond Counsel is limited to the matters set forth therein, and Co-Bond Counsel is not passing upon the accuracy or completeness of this Official Statement. Co-Bond Counsel's opinion is based on existing law, which is subject to change. Such opinion is further based on factual representations made to Co-Bond Counsel as of the date thereof. Co-Bond Counsel assumes no duty to update or supplement its opinion to reflect any facts or circumstances that may thereafter come to Co-Bond Counsel's attention, or to reflect any changes in law that may thereafter occur or become effective. Moreover, Co-Bond Counsel's opinion is not a guarantee of a particular result and is not binding on third parties, the courts or regulatory bodies; rather, such opinion represents Co-Bond Counsel's professional judgment based on a review of existing law and in reliance on the representations and covenants that each deems relevant to such opinion.

A manually executed original of such opinion will be delivered to the Underwriters on the date of payment for and delivery of the Series 2021 Bonds. The proposed form of said legal opinion appears in APPENDIX "G" to this Official Statement. For additional information regarding the opinions of Co-Bond Counsel, see the preceding section titled "TAX MATTERS." The compensation of Co-Bond Counsel is contingent upon the sale and delivery of the Series 2021 Bonds.

Certain other legal matters will be passed upon for the Underwriters by its counsel, Butler Snow LLP, Baton Rouge, Louisiana.

### FINANCIAL STATEMENTS

The financial statements included in the Comprehensive Annual Financial Report of the Sewerage and Water Board of New Orleans, for the year ended December 31, 2019, have been examined by Postlethwaite & Netterville, to the extent and for the periods indicated in their report thereon, dated as of August 18, 2020. The audited financial statements included in this Official Statement have been included in reliance upon said report. See APPENDIX "C" - Comprehensive Annual Financial Report of the Sewerage and Water Board attached hereto.

### CONTINUING DISCLOSURE

The Board and the Board of Liquidation will, pursuant to a Continuing Disclosure Certificate with respect to the Series 2021 Bonds, covenant for the benefit of Series 2021 Bond owners to provide certain financial information and operating data relating to the Board by not later than August 31 in each year, with the first report due not later than August 31, 2021 (the "Annual Report"), and to provide notices of the occurrence of certain enumerated events, which, in some cases, will only be provided if deemed by the Board to be material. The Annual Report will be filed by the Dissemination Agent with the Electronic Municipal Market Access system ("EMMA") of the Municipal Securities Rulemaking Board (and with any future Louisiana officially designated State Information Depository). Any notices of material events will be filed on behalf of the Board by the Dissemination Agent with EMMA (and with any future Louisiana officially designated State Information Depository). The specific nature of the information to be contained in the Annual Report or the notices of material events is set forth herein under the caption APPENDIX "H" - Proposed Form of Continuing Disclosure Certificate attached hereto. These covenants have been made in order to assist the Underwriters in complying with S.E.C. Rule 15c2-12 (b)(5) (the "Rule").

The Board's designated Dissemination Agent for the above information is the Secretary of the Board of Liquidation, Room 8E17, City Hall, 1300 Perdido Street, New Orleans, Louisiana 70112 (telephone 504-658-1410).

The Board and the Board of Liquidation have entered into other undertakings with respect to bonds previously issued that designated the Secretary of the Board of Liquidation as the Dissemination Agent (the "Board's Prior Undertakings"). The Outstanding Parity Bonds, to the extent subject to the Rule, are part of the Board's Prior Undertakings. The filing deadline for the required annual reports for the Board's Prior Undertakings is August 31 of each year. For fiscal years 2015, 2016 and 2018, the Board of Liquidation has filed all continuing disclosure reports currently required by the Board's Prior Undertakings under the Rule. For Fiscal Year 2017, the Board was granted an extension by the Louisiana Legislative Auditor to complete and file its annual report due to a series of emergencies. The annual report was filed on December 5, 2018. For Fiscal Year 2019, the Board of Liquidation has timely filed all information required except for the City's Audited Financial Statements, the receipt of which has been delayed because of the COVID-19 pandemic. The City expects its Audited Financial Statements to be available and filed no later than February 28, 2021. The Board of Liquidation failed to file on a timely basis certain notices indicating a change in ratings assigned to the insurers of insured bonds or to the underlying ratings. Notices of those ratings changes, along with notices indicating the Board of Liquidation's failure to timely file said notices, have since been filed. The City and the Board of Liquidation have not made any determination as to the materiality of the foregoing.

The City has entered into a separate undertaking with respect to its Limited Tax Refunding Bonds, Series 2012 (the "Series 2012 Refunding Bonds"), that designated the City's Finance Director as the Dissemination Agent (the "City's Prior Undertakings"). The filing deadline for the required annual reports for the City's Prior Undertakings is August 31 of each year. For fiscal years 2015 to 2018, the City has filed all continuing disclosure reports currently required by the City's Prior Undertakings. The reports, however, while available on EMMA, were not properly indexed to the Series 2012 Refunding Bonds. The City corrected the improper index and completed the filing of the annual reports for fiscal years 2015 to 2018 on September 6, 2019. A notice indicating the failure to properly file the annual report was filed on the same date. For Fiscal Year 2019, the Issuer has timely filed all information required except for its Audited Financial Statements, the receipt of which has been delayed because of the COVID-19 pandemic. The City expects its Audited Financial Statements to be available and filed no later than February 28, 2021. The City has not made any determination as to the materiality of the foregoing.

The Issuer has, with respect to the City's Prior Undertakings, and the Issuer and the Board of Liquidation have, with respect to the Board's Prior Undertakings, established procedures to ensure proper filing of the reports and notices required by the Continuing Disclosure Certificate and the respective prior undertakings with the MSRB in the future. Furthermore, Section 39:1438 of the Louisiana Revised Statutes of 1950, as amended, provides additional procedures designed to ensure compliance with the Continuing Disclosure Certificate by (i) requiring public entities, such as the Issuer and Board of Liquidation, to keep certain records demonstrating compliance with the Continuing Disclosure Certificate, and (ii) mandating the auditors for the Issuer and the Board of Liquidation, as part of the preparation of their respective annual financial audit, review the compliance with its continuing disclosure undertakings and record keeping requirements.

### **CO-FINANCIAL ADVISORS**

This Official Statement has been prepared under the direction of the Issuer and with the assistance of PFM Financial Advisors LLC, of New Orleans, Louisiana, and CLB Porter, LLC, of New Orleans, Louisiana, who have been employed by the Board of Liquidation to perform professional services in the capacity of independent municipal advisor (the "Co-Financial Advisors"). The Co-Financial Advisors have reviewed and commented on certain legal documentation, including the Official Statement. The Co-Financial Advisors have not audited, authenticated or otherwise verified the information set forth in the Official Statement, or any other information available to the Issuer, with respect to the appropriateness, accuracy or completeness of disclosure of such information or other information, and no guaranty, warranty or other representation is made by the Co-Financial Advisors respecting such accuracy and completeness of information or any other matter related to such information and the Official Statement.

### **BOND RATINGS**

Standard & Poor's Rating Services ("S&P") has assigned its municipal bond rating of "AA" (Stable Outlook) to the Series 2021 Bonds, with the understanding that the policy of AGM will be issued concurrently with the delivery of the Series 2021 Bonds. S&P and Fitch Ratings, Inc. initially assigned their ratings of "A-" (Stable Outlook) and "BBB+" (Stable Outlook), respectively, to the Series 2021 Bonds. Such ratings reflect only the views of such organizations and are not a recommendation to buy, sell or hold the Series 2021 Bonds. Any desired explanation of the significance of such ratings should be obtained from the rating agency furnishing the same, at the following addresses: Standard & Poor's Public Finance Ratings, Lincoln Plaza, Suite 3200, 500 N. Akard, Dallas, TX 75201, telephone 214-871-1400; or Fitch Ratings, 111 Congress Avenue, Suite 2010, Austin, TX 78701, telephone 888-262-4820. The Board of Liquidation, the Board and the City may have furnished to such rating agencies information relating to the Series 2021 Bonds, the Board and the City, certain of which information and materials have not been included in this Official Statement. Generally, a rating agency bases its rating on the information and materials so furnished and on its own investigations, studies and assumptions. A rating may be changed, suspended or withdrawn as a result of changes in, or unavailability of, information. There is no assurance that a rating will not be changed or withdrawn entirely if, in the judgment of the rating agency issuing the rating, circumstances so warrant. Any such changes or withdrawals of any rating could have an adverse effect on the market price for the Series 2021 Bonds. Neither the Board, the Board of Liquidation, nor the City, together or individually, sought a rating of the Series 2021 Bonds from any other rating agency.

### ADDITIONAL INFORMATION

For any additional information concerning the City, the Board, or the Board of Liquidation, please address Mr. David W. Gernhauser, Secretary, Board of Liquidation, City Debt, Room 8E17, City Hall, 1300 Perdido Street, New Orleans, Louisiana 70112-2197, telephone (504 658-1410). For additional information concerning the Series 2021 Bonds, please address Ms. Lisa Daniel, Public Financial

Management, Inc., 530 Oak Court Dr., Suite 160, Memphis, Tennessee 38117, telephone (901-682-8356) and Mr. Shawn Barney, CLB Porter, L.L.C., 650 Poydras St., Suite 1400, New Orleans, Louisiana 70130, telephone (504-299-3411).

### CERTIFICATION AS TO OFFICIAL STATEMENT

At the time of payment for and delivery of the Series 2021 Bonds, the City will furnish the Underwriters (1) a certificate signed by the Secretary of the Board of Liquidation to the effect that on the date of the Preliminary Official Statement, on the date of the Official Statement and on the date of the delivery of the Series 2021 Bonds, (a) the descriptions and statements of or pertaining to the Board of Liquidation, and the revenue bonds issued for the Board contained in the Official Statement were and are true and complete in all material respects; (b) insofar as such matters are concerned, the Official Statement did not and does not contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements herein, in light of the circumstances under which they are made, not misleading; (c) insofar as the descriptions and statements, including financial data, or pertaining to governmental and nongovernmental entities other than the City, and their activities, contained in the Official Statement are concerned, such descriptions, statements and data have been obtained from sources which the Board of Liquidation believes to be reliable and the Board of Liquidation has no reason to believe that they are untrue or incomplete in any material respect, and (2) a certificate signed by the Director of Finance of the City to the effect that on the date of the Preliminary Official Statement, on the date of the Official Statement and on the date of the delivery of the Series 2021 Bonds, (a) the descriptions and statements, including financial statements, of or pertaining to the City contained in the Official Statement (other than the matters covered by the certificates of the Secretary of the Board of Liquidation and the Executive Director of the Board) were and are true and correct in all material respects, (b) insofar as the City and its affairs, including its financial affairs, are concerned, the Official Statement did not and does not contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements herein, in light of the circumstances under which they were made, not misleading, and (3) a certificate signed by the Executive Director of the Board to the effect that on the date of the Preliminary Official Statement, on the date of the Official Statement and on the date of delivery of the Series 2021 Bonds, (a) the descriptions and statements, including financial statements, of or pertaining to the Board contained in the Official Statement (other than the matters covered by the certificates of the Secretary of the Board of Liquidation and the Director of Finance of the City) were true and correct in all material respects, (b) insofar as the Board and its affairs, including its financial affairs, are concerned, the Official Statement did not and does not contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements herein, in light of the circumstances under which they were made, not misleading, and (c) other than as set forth herein, there has been no material adverse change in the financial condition of the Board since December 31, 2019, the date of the last audited financial statements of the Board appearing in the Official Statement. The forgoing certificates will expressly exclude the information contained in the sections entitled "THE SERIES 2021 BONDS - Book-Entry Only System," "THE SERIES 2021 BONDS - Redemption Provisions," "CONSULTING ENGINEER'S REPORT," "FINANCIAL CONSULTANT'S FEASIBILITY REPORT," "BOND INSURANCE," "CLEARING SYSTEMS," "TAX MATTERS," "VERIFICATION OF COMPUTATIONS," and "UNDERWRITING" and in Appendix D, Appendix E, Appendix G, Appendix I, and Appendix J.

### **MISCELLANEOUS**

This Official Statement has been prepared in connection with the initial offering and sale of the Series 2021 Bonds to the Underwriters on the date hereof and is not intended for use in connection with any subsequent sale, reoffering or remarketing of the Series 2021 Bonds. Subsequent purchasers must therefore rely on their own examination of the offering, including the merits and the risks involved.

The Issuer has authorized the delivery of this Official Statement to the Underwriters.

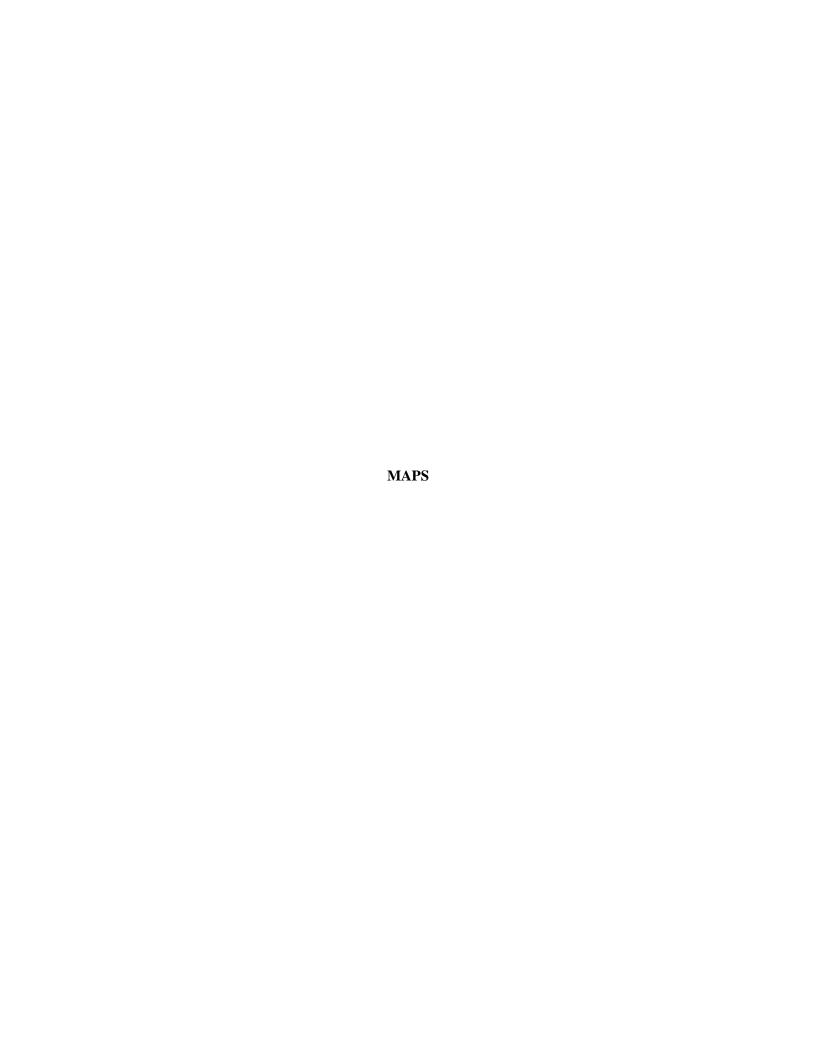
Potential purchasers of the Series 2021 Bonds should consult their own tax advisors as to the consequences of investing in the Series 2021 Bonds. Also, see "TAX MATTERS" herein.

**BOARD OF LIQUIDATION, CITY DEBT** 

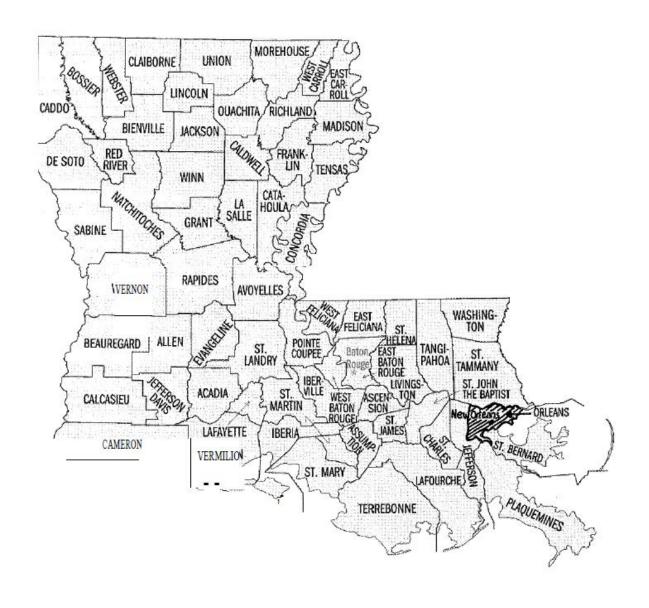
/s/ Davíd W. Gernhauser

David W. Gernhauser, Secretary

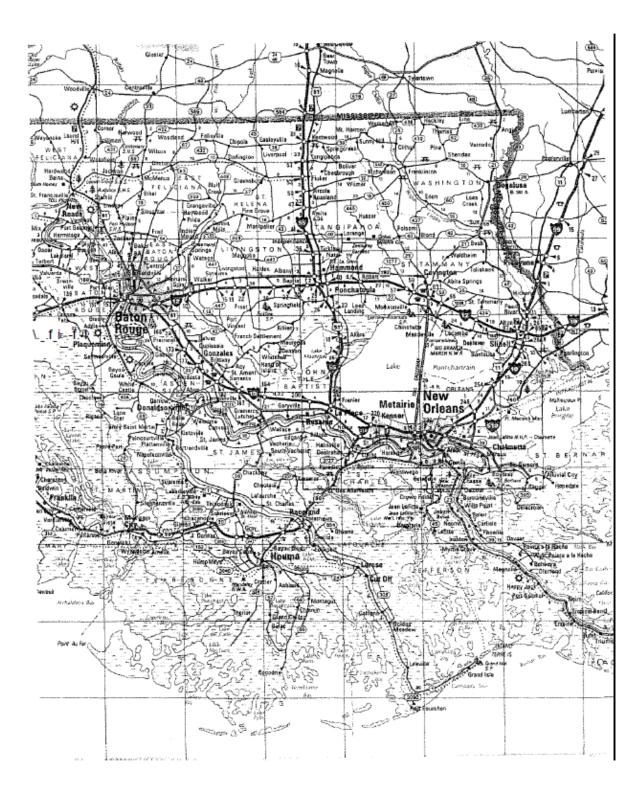








MAP INDICATING THE APPROXIMATE LOCATION
OF THE PARISH OF ORLEANS
WITHIN THE STATE OF LOUISIANA



### APPENDIX A

### SUMMARY OF BONDS TO BE REFUNDED

### WATER REVENUE AND REFUNDING BONDS, SERIES 2014 DATED JULY 2, 2014

DATE (DECEMBER 1)	PRINCIPAL PAYMENT	INTEREST <u>RATE</u>	CUSIP NOS.
2021	\$ 3,070,000	5.000 %	647753 KJ0
2027 2028 2029	2,715,000 2,850,000 2,990,000	5.000 5.000 5.000	647753 KQ4 647753 KR2 647753 KS0
2034	17,355,000	5.000	647753 KT8
2044	50,445,000	5.000	647753 KU5

### **AND**

### WATER REVENUE BONDS, SERIES 2015 DATED DECEMBER 17, 2015

DATE (DECEMBER 1)	PRINCIPAL PAYMENT	INTEREST RATE	CUSIP NOS.
2021	\$ 935,000	4.000 %	647753 LC4
2029	2,885,000	5.000	647753 LL4
2030	3,030,000	5.000	647753 LM2
2031	3,180,000	5.000	647753 LN0
2032	3,345,000	5.000	647753 LP5
2033	3,510,000	5.000	647753 LQ3
2034	3,680,000	5.000	647753 LR1
2035	3,865,000	5.000	647753 LS9
2040	22,430,000	5.000	647753 LT7
2045	35,155,000	5.000	647753 LU4



# APPENDIX B FINANCIAL AND STATISTICAL DATA RELATIVE TO THE CITY OF NEW ORLEANS AND THE PARISH OF ORLEANS, STATE OF LOUISIANA

The City of New Orleans (the "City") and the Parish of Orleans (the "Parish") have the same boundaries and are located in southeastern Louisiana, approximately 110 miles from the mouth of the Mississippi River. The City occupies an area of approximately 363.5 square miles, of which approximately 199.4 square miles are land and approximately 164.1 square miles are water. The developed area of the City consists of approximately 75 square miles; much of the relatively large amount of undeveloped land consists of reclaimed wetlands.

### **Population**

The actual population of the City, from time to time, may be larger than its basic resident population as a result of an influx of commuters, tourists, visitors and convention attendees. The New Orleans Metropolitan Statistical Area (the "MSA"), as now defined by the U.S. Office of Management and Budget, includes Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist and St. Tammany Parishes. A history of the population of the City and the MSA is provided below. The decline in population between the 2000 Census and the 2019 estimate is largely a result of Hurricane Katrina.

## Population of New Orleans and the New Orleans Metropolitan Statistical Area

	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>	<u>2010</u>	<u>2019</u>
New Orleans	570,445	627,525	593,471	557,927	496,938	484,674	343,829	390,144
MSA*	754,856	969,326	1,125,058	1,282,717	1,264,391	1,316,510	1,189,866	1,270,530

<sup>\*</sup>Restated to reflect inclusion of Plaquemines Parish in 1993.

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

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### **Assessed Valuations**

The following table sets forth the assessed value of taxable property in the City and homestead exemptions for the years 2010-2020.

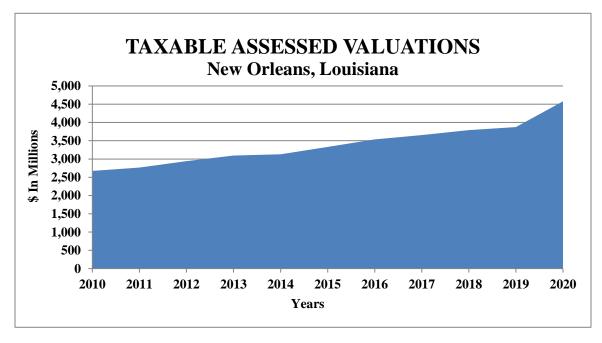
**Assessed Value of Property in the City** 

				Total	Less:	Taxable
Tax	Real	Personal	<b>Public Service</b>	Assessed	Homestead	Assessed
<b>Year</b>	<b>Property</b>	<b>Property</b>	<b>Property</b>	<b>Valuation</b>	<b>Exemption</b>	<b>Valuation</b>
2010	\$2,489,812,690	\$387,333,971	\$163,911,580	\$3,041,058,241	\$369,086,386	\$2,671,971,855
2011	2,586,081,540	385,699,970	167,557,410	3,139,338,920	372,613,310	2,766,725,610
2012	2,760,973,210	390,952,232	183,003,600	3,334,929,042	392,534,175	2,942,394,867
2013	2,920,015,480	413,120,240	193,722,510	3,526,858,230	433,616,519	3,093,241,711
2014	2,992,593,440	405,514,430	181,055,280	3,579,163,150	448,696,881	3,130,466,269
2015	3,188,376,880	431,355,330	170,541,020	3,790,273,230	458,941,272	3,331,331,958
2016	3,376,000,478	456,453,540	169,105,350	4,001,559,368	466,204,914	3,535,354,454
2017	3,481,746,470	471,985,530	175,685,210	4,129,417,210	474,168,843	3,655,248,367
2018	3,592,392,910	497,655,080	173,902,710	4,263,950,700	472,200,590	3,791,750,110
2019	3,648,117,620	527,777,040	169,565,520	4,345,460,180	471,545,070	3,873,915,110
2020	4,187,933,480	543,771,340	161,499,030	4,845,504,270	4,79,307,090	4,41,3896,760

Sources: Tax Commission (2009-2013); Department of Finance, City of New Orleans (2014-2020).

(Note: The values shown are those certified by the Tax Assessor at the beginning of each respective tax year; however, minor adjustments are often made during the tax year that may change the values shown above.

Unlike other municipalities in Louisiana, homestead exemptions are applicable to most taxes levied in the City including the Tax, pursuant to the provisions of the Louisiana Constitution. For additional information, see Tax Rates and Tax Rate Adjustments in this Appendix.



2021 information is not yet available.

### **Property Taxpayers**

The following list includes the names and the 2019 assessed valuations of the ten largest property taxpayers in the City:

			2019 Assessed
	Name of Taxpayer	Type of Business	<b>Valuation</b>
1.	Entergy Louisiana	Public Utility	\$114,981,020
2.	Capital One Bank	Banking	44,915,850
3.	Hancock Whitney Bank	Banking	40,011,140
4.	Marriot Hotel	Hotel	33,662,550
5.	BellSouth Communications	Telecommunications	27,634,120
6.	Harrah's	Casino/Hotel	26,760,580
7.	Folger Coffee	Coffee Roasting Plant	20,621,500
8.	JP Morgan Chase Bank	Banking	19,279,820
9.	International Rivercenter	Shopping Center	18,104,970
10.	Sheraton Hotel	Hotel	14,814,110
	Total		\$360,785,660

The ten largest property taxpayers accounted for approximately 9.31% of the City's 2019 taxable assessed valuation. 2020 information is not currently available.

Source: Department of Finance, City of New Orleans.

### **Property Tax Collections**

The following table shows the percentage of the total property tax collections in the City and all other tax recipient entities in the Parish in each year from 2011 through 2020:

Tax	
<u>Year</u>	<b>Percent</b>
2011	99.25%
2012	99.20
2013	99.18
2014	98.99
2015	99.09
2016	98.85
2017	98.56
2018	96.77
2019	99.83
2020	95.33

2016 and prior personal property receivables are considered prescribed and no longer legally enforceable during 2019.

Source: 2011-2018, Department of Finance, City of New Orleans; 2019-2020, Board of Liquidation. 2020 figure as of August 31, 2020. All figures unaudited.

### **Default Record**

Neither the City nor the Board have ever defaulted in the payment of its outstanding bonds.

### **ECONOMIC INDICATORS**

### Per Capita Personal Income

A comprehensive revision of the estimates of Per Capita Personal Income by State was published in November 2019 by the Bureau of Economic Analysis of the U.S. Department of Commerce. The recent trends in revised per capital personal income for the Parish, State and the Nation are indicated in the following table:

	Per Capita Personal Income				
	<u>2014</u>	2015	<u>2016</u>	2017	<u>2018</u>
Orleans Parish	\$45,995	\$47,782	\$48,148	\$49,436	\$52,004
Louisiana	42,684	43,034	42,726	43,938	46,242
United States	47,058	48,978	49,870	51,885	54,446

Source: U.S. Department of Commerce, Bureau of Economic Analysis. November 14, 2019.

(The personal income level for the United States is derived as the sum of the county estimates; it differs from the national income and product accounts (NIPA) estimate of personal income because by definition, it omits the earnings of Federal civilian and military personal stationed abroad and others. It can also differ from the NIPA estimate because of different data sources and revision schedules.)

The Louisiana Workforce Commission has issued revised annual average statistics not seasonally adjusted for various employment areas within Louisiana. The annual average figures for the Parish were reported as follows:

<b>Year</b>	<b>Labor Force</b>	<b>Employment</b>	<b>Unemployment</b>	Parish Rate	State Rate
2015	181,971	170,104	11,867	6.5%	6.3%
2016	179,955	169,401	10,554	5.9	6.1
2017	178,474	169,295	9,179	5.1	5.1
2018	178,349	169,410	8,939	5.0	4.9
2019	178.834	170.121	8.713	4.9	4.8

The preliminary figures for June 2020 for the City were reported as follows:

<b>Month</b>	Labor Force	<b>Employment</b>	<b>Unemployment</b>	Parish Rate	State Rate
06/20	178,401	149,781	28,620	16.0%	10.5%*

The preliminary figures for the New Orleans MSA for June 2020 were reported as follows:

<b>Month</b>	Labor Force	<b>Employment</b>	<b>Unemployment</b>	Parish Rate	State Rate
06/20	574.918	500.752	74.166	12.9%	10.5%*

<sup>\*</sup> Seasonally adjusted rate was 9.7.

Source: Louisiana Workforce Commission, July 24, 2020.

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The following table shows the composition of the employed work force not seasonally adjusted in the MSA.

## Nonfarm Wate and Salary Employment by Major Industry (Employee in Thousands)

	Preliminary	Revised	
	<b>June 2020</b>	May 2020	<u>June 2019</u>
Minning & Logging	3.8	3.8	4.3
Construction	23.3	24.8	29.3
Manufacturing	27.8	27.6	30.1
Trade, Tansportation, & Utilities	101.3	95.1	111.9
Information	6.6	6.7	7.4
Financial Activities	30.0	30.0	30.5
Professional and Business Services	66.4	65.4	76.6
<b>Education and Health Services</b>	98.8	95.6	102.6
Leisure and Hospitality	61.7	47.8	92.7
Other Services	21.3	20.6	24.7
Government	68.9	69.5	73.8
Total	<u>509.9</u>	<u>486.9</u>	<u>583.9</u>

Source: Louisiana Workforce Commission.

### **Largest Employers**

The names of several of the largest private employers located in the City and their approximate number of local employees were reported as follows:

		Approximate Number of
<b>Employer</b>	Type of Business	<b>Employees</b>
Ochsner Health System	Health Care	17,542
LCMC Health	Health Care	8,286
Tulane University	Higher Education	5,960
Acme Truck Line	Transporation	1,800
Pan-American Life Insurance Group	Life Insurance	1,700
Laitram	Manufacturing	1,542
Georges Enterprises	Food, Investments, Real Estate	1,045
Boh Bros. Construction Co.	Construction	900
Canal Barge Company, Inc.	Inland Marine Transportation	864
Bernhard, MCC	Contractor	775

Source: New Orleans City Business 2018-2019 Book of Lists.

Note: This list excludes some major employers who declined to supply employment information. The list also excludes State and local governmental employers.

No assurance may be given that any employer listed will either continue to locate in the City or maintain employment at the level stated.

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The following table shows the composition of the employed work force, not seasonally adjusted, in the City for the periods indicated.

ANNUAL AVERAGE ORLEANS PARISH CONCURRENT ECONOMIC INDICATORS, 2015, 2016, 2017, 2018 AND FOURTH QUARTER 2019 (All data not seasonally adjusted)

B-6

Source: Louisiana Workforce Commission as of March 22, 2019.

### Construction

The New Orleans CityBusiness Top Construction Projects, 2020, were published on February 18, 2020, lists the top construction projects taking place within the MSA. The following construction projects are partially or wholly within the city limits of New Orleans:

PROJECTS	TOTAL COSTS
Street, Sewer and Water Repairs	\$2.3 Billion
New Orleans Public Schools	\$2.0 Billion
Yuhuang Chemical Methanol Plant	\$1.85 Billion
Ernest N. Morial Convention Center	\$557 Million
South Market District	\$500 Million
Four Seasons Hotel & Private Residence	\$465 Million
Mercedes Benz Superdome Renovations	\$450 Million
LCMC Health Expansion	\$400 Million
National World War II Museum	\$400 Million
Ochsner Health System Expansion	\$360 Million

### Housing

The Real Estate Market Data Center for the Institute for Economic Development & Real Estate of the University of New Orleans periodically publishes its *Real Estate Market Analysis New Orleans and Northshore Regions*, a recent edition being dated April 2019 (the "Analysis"). According to the Analysis, average prices in this sector of the market continue to rise. Average prices rose across all three major submarket sectors for the second year running.

Single family home prices in the Parish between 2017 and 2018 rose at an average of just over 8.1% from \$324,222 to \$350,493. This was driven largely due to strong price appreciation for homes located in traditionally high demand Central Orleans neighborhoods such as Uptown, Lakeview/Lakefront, City Park, French Quarter/Faubourgs and Mid-City. Unit sales in the Parish rose 0.36% from 3,072 in 2017 to 3,083, in 2018, while at the same time aggregate dollar volume of sales increased 8.4%, from \$996.3 million to \$1.08 billion

Average prices rose in ten of eleven zip codes comprising the Central Orleans at appreciation rates ranging from 1.2% in the 70113 zip code (from \$194,067 to \$196,423) to 16.6% in the 70119 zip code (\$307,198 to \$358,091). Double digit price appreciation for broker assisted sales also occurred in the 70118 zip code (11.0%) and 70130 zip code (10.9%). Some neighborhoods experienced fairly significant price compression through 2018. This included neighborhoods located in the 70125 zip code (-3.0%).

In Eastern New Orleans, between 2017 and 2018 unit sales decreased from 480 to 469 (-2.3%) and aggregate dollar volume also decreased from \$63.2 million to \$63.1 million (-0.4%). At the same time average prices rose by just over 2.3% (from \$131,706 to \$134,702) and average marketing time dropped from 83 days in 2017 to 70 days in 2018 or by just over 15%. Average prices increased in three of the four zip codes that encompass Eastern New Orleans ranging from 3.9% (from \$112,340 to \$116,730) in the 70127 zip code to 9.3% (from \$139,322 to \$152,325) in East New Orleans. In the 70126 zip code, average prices among 164 broker assisted sales recorded approximately 8.9% increase (from \$120,350 to \$131,009), while in the 70128 zip code, average prices among 132 units sold decreased by 3.8% from \$158,405 in 2017 to \$152,432 in 2018.

Sale volumes on the Westbank of Orleans Parish between 2017 and 2018 rose by 12.4% and 1.7% in units and aggregate dollar volume, respectively. At the same time, the average price of a single family home edged up 6.6% from \$187,658 to \$200,112 as average marketing time rose from 69 to 71 days. Average prices in the 70114 and 70131 zip codes rose by 6.6% and 6.1%, respectively. The Algiers and Lakewood areas of Algiers offer a rather wide variety and mix of affordable workforce housing in the region. The development of the Federal City project should help to fuel demand for some of this inventory and bring some stability to this market sector's single family housing prices which have been in steady decline since 2007.

### **Education**

Elementary and secondary education in the Parish is provided by public, charter, parochial and private schools. The state-run New Orleans Recovery School District, an intermediate educational unit created in 2003 by the State legislature for the purpose of governing public schools in failing school districts, primarily Orleans Parish, has approximately 48,545 public school students in the City, 20,093 students being in the Recovery School District.

Institutions of higher education located in the City include:

	Fall Enrollment					
<u>Institution</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u> 2017</u>	<u>2018</u>	<u>2019</u>
University of New Orleans	9,234	8,423	8,037	7,964	8,151	8,231
Tulane University	13,531	13,449	13,581	13,602	14,062	14,199
Loyola University New Orleans	4,496	4,273	3,836	3,858	4,302	4,422
Southern University at New Orleans	2,734	2,704	2,430	2,535	2,420	2,356
Xavier University of Louisiana	2,926	2,969	2,997	3,044	3,231	3,325
Dillard University	1,200	1,185	1,261	1,291	1,309	1,225
•	<u>34,121</u>	33,003	<u>32,142</u>	<u>32,294</u>	<u>33,475</u>	<u>33,758</u>

Source: NOLA.Com/The Times-Picayune; Xavier University; Southern University of New Orleans; Tulane University; The University of New Orleans.

These seven institutions educate students in fields such as engineering, health care, public administration, urban studies, law, business, psychology, social sciences, communications, nursing, music, computer information systems, criminal justice, pharmacy, education, and theology. In addition, Delgado Community College, with a 2019 fall enrollment of 14,140, the LSU Health Sciences Center-New Orleans, with a 2018 fall enrollment of 2,809, and other similar facilities educate persons in various trades. Also, the acute care hospitals previously listed under the "Largest Employers" have research and teaching facilities and staff to educate, train and employ physicians and medical personnel who come from numerous foreign and domestic locations.

### **Recent National Recognition of the City and Region**

The City and the Greater New Orleans Region have recently been recognized by multiple publications for various achievements and accomplishments, including the following:

### General

- GNO, Inc. was named a Top Economic Development Agency in the USA (one of 11 of 2,300+) [Site Selection]
- GNO, Inc. was ranked as the #2 Economic Development Organization in the U.S. [Business Facilities]

- Greater New Orleans was ranked #1 for the Decade for Economic Development Wins in the South [Southern Business & Development]
- Greater New Orleans was named #2 for Industrial Real Estate Growth in the USA [CoStar]
- Greater New Orleans is a "Top Tech Hub in America" [Business Facilities]
- Greater New Orleans is #1 in the USA for Export Growth, over 400% [US Chamber of Commerce]
- MSY/New Orleans International is the #3 Fastest Growing Airport in America, 2007-2017 [FAA]
- New Orleans was named the #1 City (of 475) for Employment, Income, and Population [Nerd Wallet]
- Greater New Orleans is the #3 Big City Winning the IT Jobs Battle (after Silicon Valley and S.F.) [Forbes]
- Port of South Louisiana is the #1 Largest in the Western Hemisphere [Fairplay]

### Talent / Workforce

- New Orleans was ranked #1 on the list of Americas Biggest Brain Magnets [Forbes]
- New Orleans is the #1 Fastest Growing Traditional City in America [Public Square/ U.S. Census]
- Louisiana's FastStart training program ranked #1 in the USA nine years in a row [Business Facilities]
- Greater New Orleans is Top 10 in the USA for share of "Millennial (22-34) Jobs" [Emsi]
- The New Orleans Metro area is #1 in the USA for in-migration of international residents [U.S. Census]

### **Entrepreneurship**

- New Orleans is the Best City in America for Creative Professionals [SmartAsset]
- Greater New Orleans is #2 in the USA for Growth in Knowledge Industries [EMSI]
- New Orleans is the #5 city where entrepreneurship is booming [Entrepreneur]

### Quality of Life

- New Orleans is #1 Place to Go in the World in 2018 [New York Times]
- New Orleans is the #2 Favorite City in America [Trvavel + Leisure]
- New Orleans is a Most Dynamic City in America [Worth]
- New Orleans is #1 City in America for Growth in International Tourists [U.S. Department of Commerce]
- New Orleans was named "Americas Best City for School Reform [*Thomas B. Fordham Institute*]

For further information, see the website of Greater New Orleans, Inc., a regional economic development alliance, at http://gnoinc.org/news/awards-and-rankings/.



### APPENDIX C

# COMPREHENSIVE ANNUAL FINANCIAL REPORT OF THE SEWERAGE AND WATER BOARD

The 2019 Comprehensive Annual Financial Report of the Sewerage and Water Board is available in PDF format at the Sewerage and Water Board's website:

https://www.swbno.org/Reports/Financial

The 2019 Comprehensive Annual Financial Report can be viewed at the Municipal Securities Rulemaking Board - Electronic Municipal Market Access (MSRB-EMMA) site using the following link:

https://emma.msrb.org/P11404180-P11091611-P11500229.pdf



### APPENDIX D

CONSULTING ENGINEER'S REPORT



### **DRAFT ENGINEERING REPORT**

# WATER SERVICE REVENUE REFUNDING BONDS SERIES 2021

**B&V PROJECT NO. 405668** 

**PREPARED FOR** 

Sewerage and Water Board of New Orleans

**5 JANUARY 2021** 





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### **Acronyms**

AMI—Advanced Metering Infrastructure

Avenu—Avenu Insights & Analytics, LLC

AWWA—American Water Works Association

Black & Veatch—Black & Veatch Corporation

Board—Board of Directors

CAM—Customer Account Management

CCR—Consumer Confidence Report

City—City of New Orleans

CIP—Capital Improvement Program

COBOL—Common Business Oriented Language

CSM—Customer System Management

D/DBPR—Disinfectants and Disinfection By-Products Rule

DPW—Department of Public Works

DROP—Deferred Retirement Option Plan

ESWTR—Enhanced Surface Water Treatment Rule

EWOCDS—Early Warning Organics Contamination Detection System

FBRR—Filter Backwash Recycling Rule

FEMA—Federal Emergency Management Agency

FY—Fiscal Year

HAA5—Five Haloacetic Acids

HMGP—Hazard Mitigation Grant Program

HR-Human Resource

Hz-Hertz

ILI—Infrastructure Leak Index

LDEQ—Louisiana Department of Environmental Quality

LRAA—Locational Running Annual Averages

LT2ESWTR—Long Term 2 Enhanced Surface Water Treatment Rule

mgd—Million Gallons per Day

mg/L-milligrams per Liter

MRDL-Maximum Residual Disinfectant Limit

MW-Megawatts

NTU—Nephelometric Turbidity Unit

PSI—Pounds per Square Inch

RAA—Running Annual Average

RFP—Request for Proposal

RFQ—Request for Qualifications

RTCR—Revised Total Coliform Rule

SDWA—Safe Drinking Water Act

SELA—Southeast Louisiana

SWBNO—Sewerage and Water Board of New Orleans

TCR—Total Coliform Rule

TOC—Total Organic Carbon

TTHM—Total Trihalomethanes

UCMR-4—Unregulated Contaminant Monitoring Rule

μg/L—Micrograms per Liter

USEPA—United States Environmental Protection Agency

WPP—Water Purification Plant

# 1.0 Introduction

# 1.1 Purpose

The purpose of this report (Report) is to summarize the findings of engineering studies performed by Black & Veatch Corporation (Black & Veatch) related to the water system of the Sewerage and Water Board of New Orleans (SWBNO) in conjunction with the issuance of a maximum of \$205,000,000 of Water Service Revenue Refunding (Series 2021) bonds.

In preparing this report, Black & Veatch performed site visits of SWBNO's major water facilities in October of 2020. Black & Veatch also conducted personal interviews with administrative and support staff in November of 2019. Black & Veatch collected and reviewed basic operating data at that time. The Organization and Structure section reflects changes in key management positions as of October of 2020.

Subject to the limitations set forth herein, this Report was prepared for SWBNO by Black & Veatch and is based on information not within the control of Black & Veatch. Black & Veatch has not been requested to make an independent analysis, verify the information provided to it, or render any independent judgment of the validity of others' information. As such, Black & Veatch cannot, and does not guarantee the accuracy thereof.

In conducting the analysis and forming an opinion of future operations summarized in this Report, Black & Veatch has made certain assumptions regarding conditions, events, and circumstances that may occur in the future. The methodology utilized by Black & Veatch in performing the analysis follows generally accepted practices. While Black & Veatch believes the assumptions are reasonable and appropriate, and the methodology valid, actual results may differ materially from those anticipated, as influenced by the conditions, events, and circumstances that occur that are unknown at this time and/or which are beyond the control of Black & Veatch.

SWBNO may only distribute the complete Report to third parties, including the above statements and not parts thereof. Any distribution of this Report, or any excerpt thereof, to third parties, shall be at SWBNO's sole risk. SWBNO's duty to distribute only the complete Report, including the above statements, shall not apply to internal SWBNO documents derived from the Report that come within the scope of applicable records laws and are requested under such laws by interested citizens.

# 1.2 Scope

This Report addresses the organization and management, physical condition, adequacy of system capacity, operation and maintenance practices, and staffing levels of SWBNO's water system. It also provides a review of the proposed Capital Improvement Program (CIP) of SWBNO.

Black & Veatch prepared this Report in conjunction with the issuance of Water Service Revenue Bonds, Series 2021. The purpose of the Series 2021 bonds is to pay the costs of constructing system improvements, extensions, betterments and repairs to the water system.

# 1.3 Black & Veatch Qualifications

Black & Veatch is one of the largest and most experienced engineering, construction, and consulting firms in the United States specializing in utility engineering. The firm's experience includes the planning, design, operational analysis, and construction of water, wastewater, and energy generation and transmission systems. Additionally, the firm has extensive experience in assisting utilities with

management and financial aspects of their operations. Black & Veatch has engaged in more than 40,000 projects for over 7,000 clients, including utilities owned by municipalities ranging in size from small villages to large metropolitan regions, investor-owned utilities, industrial and commercial businesses, agencies of the United States, and international governmental agencies.

This Report was prepared for the SWBNO by Black & Veatch and is based on information not within the control of Black & Veatch. Black & Veatch has assumed that the information, verbal and written, provided by others is complete and correct; however, Black & Veatch does not guarantee the accuracy of the information, data, or opinions contained herein.

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# 2.0 Executive Summary

The purpose of this Report is to summarize the findings of engineering studies performed by Black & Veatch Corporation (Black & Veatch) related to the water system of the Sewerage and Water Board of New Orleans (SWBNO) in conjunction with the issuance of a maximum of \$205,000,000 of Water Service Revenue Refunding (Series 2021) bonds.

The following section provides a summary of the conclusions. This Report should be read and considered in its entirety as the Report provides additional information relevant to the operations of SWBNO outside of this executive summary.

# 2.1 Organization and Management Conclusions

Based on the 2020 review of SWBNO's organizational and managerial structures, Black & Veatch has reached the following conclusions:

- SWBNO is organized effectively to carry out its mission to provide water services to New Orleans' citizens. The organization includes managers who have experience in the critical areas of utility finance, planning, operations, and engineering. Administrative units are tasked with key utility functions such as planning and budgeting, emergency management, human resources, and customer service. The operational units consist of departments focused on providing water service.
- The management team consists of individuals with significant water, sewerage, and drainage experience. This experience has been developed internally at SWBNO, other respected major water and sewer utilities, and other City departments.
- Like many other water and sewer utilities across the U.S., the departments that comprise SWBNO face a significant number of pending retirements. Approximately 17.7 percent of current employees are either on the DROP program or are eligible for retirement. These pending retirements pose a significant threat to SWBNO's ability to perform its core operational and administrative functions unless SWBNO fills these positions with a steady influx of qualified replacements. Succession planning and recruitment of qualified employees will be key elements for SWBNO to adjust to the pending retirements.
- SWBNO has several departments that are experiencing critical vacancies, including Operations, Finance and Administrative. SWBNO has made progress with reducing vacancies associated with operations and addressing these vacancies to maintain effective operational and maintenance performance and administrative oversight.
- With pending retirements, current vacancies, and a significant CIP to be implemented, a detailed staffing analysis of the various departments appears to be warranted. The staffing analysis, including assessing the necessary skills and levels by department, can help SWBNO's management with the efficient replacement of employees and develop revised job descriptions for use with the Civil Service hiring process. SWBNO has started to examine staffing positions, as shown in Table 3-1. SWBNO expects budgeted positions to remain stable from 2019 to 2020.
- SWBNO has started the process of updating its information systems. In 2016, SWBNO had Cogsdale start updating the customer information system with a new Customer Service Management (CSM) system, and in 2018, Cogsdale implemented the human resource system with a Microsoft Dynamic Great Plains System. SWBNO expects to continue to replace other

- core information systems, including the financial management and work order management systems, over the next few years.
- SWBNO developed a strategic plan in 2011 to address current and future challenges between 2011 and 2020. The plan included an assessment of strengths and weaknesses and strategies and tactics for strengthening the organization over the coming years. As SWBNO approaches 2021, they are starting to develop and update the strategic plan based on the new challenges facing SWBNO.

# 2.2 Water System Conclusions

Based on the 2020 review of SWBNO's water system, Black & Veatch has reached the following conclusions:

- SWBNO has an abundant water supply via the Mississippi River to provide service to existing and future customers.
- SWBNO consistently meets or exceeds state and federal standards for the provision of drinking water. The treatment capacity for the Carrollton Water Purification Plant (WPP) and Algiers WPP is sufficient to meet current and projected demands.
- Overall, SWBNO's water purification plants are adequate and include processes and components that are common in the water industry. The water purification plants need infrastructure upgrades or replacements to sustain reliable operations. The most critical capital needs are the Carrollton WPP filters and underdrains, which are in poor condition.
- The amount of non-revenue water, which is water produced by SWBNO but not sold to customers, is well above what is typical for a similar-sized utility. SWBNO is acting to address the issue through several initiatives, including leak detection technology, the Federal Emergency Management Agency (FEMA) funded replacement of the distribution system; the FEMA-funded Water Hammer program, meter replacement; and account validation. These initiatives are common techniques in the water industry to identify and reduce non-revenue water and eventually yield improved results over the long term.
- From 2008 through 2017, an outside consultant performed a water audit per American Water Works Association (AWWA) guidelines. The AWWA guidelines recommend conducting annual water audits. This annual water audit can provide an effective basis for understanding areas of non-revenue water and tracking progress toward reducing the amount of non-revenue water to more typical levels. The most recent audit results indicate that the Infrastructure Leak Index (ILI), a ratio of annual real losses to unavoidable annual real losses, has decreased from 46.0 in 2008 to 37.1 in 2014 or 19 percent. The Board's goal was to reduce the ILI by 4 points per year to achieve a 5-year target of 22.4 by 2020. SWBNO is currently performing water audits for 2018 and 2019.
- Over the years, SWBNO has developed a redundant power supply to primarily sustain drainage operations during significant emergencies such as hurricanes. The power plant can also provide power to sustain drinking water low service pumping, treatment operations, and high service pumping during events where the local power source is down. These power assets are unique within the water industry but necessary to provide a mechanism for SWBNO to sustain critical operations during significant storm events.

- Significant FEMA funds are being dedicated over the coming years to rehabilitate and prepare the power assets to provide reliable power during future storm events.
- SWBNO continues to rebuild the water system to recover from the impact of Hurricane Katrina in 2005. The FEMA-funded hurricane recovery projects will rehabilitate or replace significant pumping assets and a significant portion of the water distribution system.

# 2.3 Capital Improvement Program Conclusions

Based on the 2019 review of the SWBNO's water system and associated reports and documents, Black & Veatch has reached the following conclusions:

- SWBNO's Capital Improvement Program appropriately addresses major system deficiencies and initiatives.
- About 75.5 percent of the total CIP noted for fiscal year (FY) 2020 through FY 2024 is projected to be funded from other sources, including FEMA, hazard mitigation and fair share funds. Many of these projects are focused on rebuilding the water system, as well as preparing SWBNO to sustain operations in the future. The fair share program was established in June of 2020 between the City, SWBNO and the hospitality industry to provide recurring annual revenue of up to \$26 million to SWBNO projects and infrastructure work.
- SWBNO is monitoring and re-evaluating the CIP prioritization on an annual basis. It is expected that adjustments will occur to CIP projects' costs and timing once SWBNO initiates a more detailed design. The prioritization component of SWBNO's CIP development process provides a logical basis for managing CIP implementation.
- The CIP maintains an aggressive schedule for completing capital projects. SWBNO is qualified to manage the CIP implementation and will continue to retain additional, outside engineering support to complete these projects. An increased focus by SWBNO on program management, purchasing, and project approval processes will be needed to prevent significant delays in completing the CIP.

# 3.0 Organization and Management

# 3.1 Organization and Structure

SWBNO is a self-supporting enterprise fund utility that operates the water, sewer, and drainage systems that provide service to the City of New Orleans (City). The systems date back to the late 19<sup>th</sup> century when City leaders moved to create drainage, water, and sewer systems to respond to flooding (drainage system), provide drinking water and fire protection (water system), and alleviate unsanitary conditions related to the disposal of human waste (sanitary sewer system). The Drainage Commission was organized in 1896 to develop a drainage master plan for the City. The Sewerage and Water Board was organized in 1899 to begin planning and constructing the water and sanitary sewer systems that would provide service to the residents of New Orleans. The Drainage Commission was merged with the Sewerage and Water Board in 1903 and has continued to provide drainage, water, and sanitary sewer service ever since as the Sewerage and Water Board of New Orleans. In addition to operating the water, sewerage, and drainage systems, SWBNO is responsible for capital planning, construction, budgeting and accounting, financial planning and rate setting, meter reading, billing, customer service, and various other administrative functions necessary for managing a utility.

SWBNO's Mission is "...providing safe drinking water; removing waste water for safe return to the environment; and draining storm water to protect our community...." The vision of SWBNO is "...to earn and hold the trust and confidence of our customers and community for reliable and sustainable water services...."

Based on the review of the assets and operations of SWBNO, there are several key challenges that it will face soon, including:

- Hurricane Katrina Recovery Efforts. In 2005, the City was devastated by flooding caused by levee breaks following Hurricane Katrina, which also significantly impacted the assets of SWBNO. Since then, SWBNO has embarked on a substantial rebuilding effort that continues to this day. Significant ongoing projects related to the sewer pump stations, power plant, and water distribution system are meant to return these Katrina-impacted assets to good working condition. The capital budget planned by SWBNO includes a portion of Hurricane Katrina related projects scheduled for completion over the coming years.
- Staffing. As with many other utilities across the U.S., SWBNO faces a wave of retirements over the coming years. The loss of personnel and the associated experience will challenge management to hire and retain the next generation of employees to continue providing capable water services.
- Information Systems. SWBNO has updated many business systems that provide customer service and manage different parts of its business over the past five years. Currently, the SWBNO is incorporating revised processes and procedures to benefit from these systems' capabilities fully. SWBNO is planning to replace and/or upgrade other important systems over the coming years. These necessary ventures will require planning and preparation to seamlessly integrate the new systems with ongoing operations and other planned initiatives.
- Water System Non-Revenue Water. The drinking water system experiences a significant amount of unmetered, non-revenue water that appears to be related to leaks in the transmission and distribution system. SWBNO continues several initiatives to address this condition, including

- capital repair and replacement of water distribution mains, proactive use of leak detection technology, and the installation of Advanced Metering Infrastructure (AMI).
- Other Capital Repair and Replacement Projects. In addition to the projects mentioned above, SWBNO plans to invest in projects to return other critical assets to good working order, including the water treatment plants.

Implementation of these initiatives will be the SWBNO Board of Directors and Management's responsibility, described in more detail in the following sections.

#### 3.1.1 Board of Directors

SWBNO is governed by an 11-member Board of Directors (Board). In 2013, during a Louisiana regular legislative session, several changes were made to the state statutes that govern the makeup and actions of SWBNO. As a result of those changes, the SWBNO's Board functions as follows:

- The Board includes the Mayor and the chair of the Public Works, Sanitation and Environment Committee, two members from the City's Board of Liquidation and seven citizen members (5 from each of the council districts of the City and two consumer advocates).
- The seven citizen members are selected by a Selection Committee that consists of ten members, including 1) president of Dillard University or designee; 2) president of Loyola University or designee; 3) president of Tulane University or designee; 4) president of Xavier University or designee; 5) chancellor of Delgado Community College or designee; 6) chancellor of University of New Orleans or designee; 7) chancellor of Southern University at New Orleans or designee; 8) chair of the board of directors of New Orleans Chamber of Commerce or designee; 9) president of the board of directors of New Orleans Regional Black Chamber of Commerce or designee; and 10) chair of the board of directors of the Urban League of Greater New Orleans or designee.
- The general process for determining Board members requires that vacancies to the Board are published to achieve public awareness and solicit nominees for replacement. The Selection Committee reviews the list of applicants and determines whether they are qualified, and then submits a list of three qualified candidates to the Mayor for consideration. The Mayor then selects one of the three individuals and submits the nominee to the City Council for consideration and approval. If City Council approves, the nominee is appointed to the Board. If the City Council does not approve, the Selection Committee will re-convene and select three qualified individuals for submittal to the Mayor to re-start the process.
- Each nominee needs to have experience in architecture, environmental quality, finance, accounting, business administration, engineering, law, public health, urban planning, facilities management, public administration, science, construction, business management, community or consumer advocacy, or other pertinent disciplines.
- The term of each Board member is four years. The members cannot serve more than two consecutive terms. There are staggered initial terms determined by lot for the seven citizen members.
- There is a requirement for the Board to submit additional reports every quarter to the City Council. The reports generally cover standard industry metrics; processes and indicators to prevent waste and fraud; performance metrics for employees and contractors; benchmarks on the coordination of SWBNO and the City's Department of Public Works for ensuring resource alignment; effectiveness and efficiency of information systems; improvements to system

redundancy; and status of operational reforms, capital improvement programs, and service assurance programs.

#### 3.1.2 Management

SWBNO is led by the Executive Director, who reports to the Board. The Executive Director, Mr. Ghassan Korban, assumed his position in September of 2018. While the Board provides leadership, policy direction, and oversight, the Executive Director manages the day to day operations of SWBNO along with the Chief of Staff, Chief Financial Officer, General Superintendent, Chief Customer Service Officer, Chief Administrative Officer, and Chief Communications Officer.

- Executive Director: Ghassan Korban joined SWBNO in September 2018 and brings over 30 years of public service experience. He last served as the Commissioner of the Department of Public Works for the City of Milwaukee. He spent his first 20 years with the City in the Infrastructure Services Construction Section as Project Engineer, Testing Laboratory Manager Assistant, Construction Supervisor, District Manager, and Chief Construction Engineer. During his tenure, he managed a \$60 million construction budget. He was also responsible for one of two Design and Construction Districts in the City of Milwaukee, managing a staff of 50 engineers, technicians, and administrative staff.
- General Superintendent: Robert Turner joined SWBNO in August 2017 and brings more than 35 years of engineering experience. He is a registered professional Civil Engineer. Before serving SWBNO, Turner served as the Director of Engineering for the Flood Protection Authority-East. He has an extensive background in flood protection and public works, including serving as the Executive Director of the Lake Borgne Basin Levee District and as the Director of Public Works for St. Bernard Parish. Additionally, he served as the Louisiana State representative on the National Committee on Levee Safety. He served on the National Association of Flood and Stormwater Management Agencies Board of Directors.

The key management team appears well qualified to run SWBNO, yet an open position remains to be filled for the Chief Customer Service Officer.

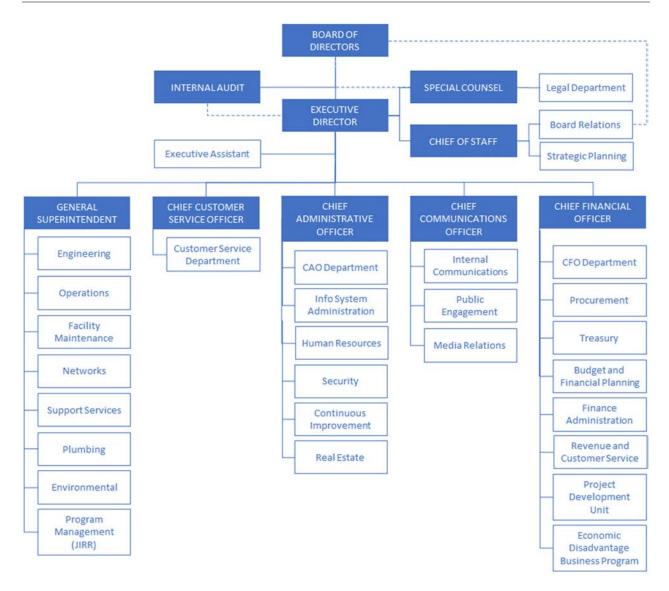


Figure 3-1 Organizational Chart (as of November 2020)

The department heads and staff reflect significant operational and professional experience in addition to the core management team. For example, there are 109 staff employees with over 30 years of experience with SWBNO. Other managers maintain significant experience with SWBNO but also have experience within the City or separate organizations.

## 3.1.3 Staffing

There are employees with significant experience within SWBNO's operations and business functions, providing benefits such as institutional knowledge and operational experience. As of November 2020, SWBNO has approximately 1,290 total employees. This total does not include contract employees, such as Veolia employees who operate and maintain the sewage treatment plants and 41 employees who assist in Information Technology. Table 3-1 provides the current number of employees at SWBNO by department and the associated vacancies.

There are significant vacancies in some of the key departments, including Operations, Finance, and Administrative. These are key areas where the lack of qualified personnel can impact core

responsibilities and administrative oversight. For most of these, the positions have been approved by the Board but remain vacant. This approval requirement initiates the hiring process and allows SWBNO's Human Resources (HR) Department to work with the City of New Orleans' Department of Civil Service (Civil Service) to look for replacements. SWBNO initiates the hiring process and manages personnel. However, Civil Service has an approval role through each step of the process. Civil Service has developed policies and procedures that must be followed by SWBNO to hire any new personnel. In general, interviews with SWBNO indicate that hiring suitable replacements for the vacancies noted above is a challenge due to several factors, including:

- Lack of Qualified Candidates—The operating departments for SWBNO include more technical and labor-intensive positions such as electricians, engineers, laborers, and mechanics. In many instances, SWBNO manager's report that the candidate pool does not maintain the technical experience associated with the job needed.
- Cumbersome Hiring Process—The process for hiring through Civil Service requires adding eligible candidates to an eligible list. All hires must take place before the candidate "expires" off the list. This process can be cumbersome.
- Pay Limits and Residency Requirements—Working for SWBNO includes a residency requirement to live within Orleans Parish. Additionally, managers note that pay scales for more technical jobs such as engineering and skilled labor are not competitive with similar private-sector jobs. In some instances, disincentives exist where promotion to a managerial position could result in less pay due to exemption from overtime.

Despite these hurdles, SWBNO management believes that the process for hiring additional employees and replacements for the existing employees that will be retiring can and will be improved. SWBNO hired a new HR Director to implement agency-wide process improvements and work closely with Civil Service to achieve hiring efficiencies. Also, SWBNO has partnered with Delgado on several training programs to support the facility maintenance department. There was also a classification/compensation study completed in 2017.

Other initiatives include providing more SWBNO-specific job descriptions to Civil Service to assist with providing a more focused and qualified set of candidates to evaluate; completion of job studies to create or design new positions to meet the changing outlook of SWBNO; strengthening the communication between SWBNO and Civil Service; and participation by members of the Personnel Department (Personnel) at local and regional job fairs to recruit workers interested in the water, sewerage, and drainage fields.

Department	# of Employees	# of Authorized in 2020	# of Vacancies	% Vacant	# of Authorized in 2019
Chief Administrative Officer (1)	50	65	15	23.1%	64
Chief Financial Officer (2)	298	378	80	21.2%	380
Chief of Communications	3	4	1	25.0%	8
Chief of Customer Service (3)	0	1	1	100.0%	0
Executive Director	16	16	0	0.0%	18
General Supt/Operations (4)	913	1,103	190	17.2%	1,100
Special Counsel/Legal	10	17	7	41.2%	16
Total	1,290	1,584	294	18.6%	1,586

Table 3-1 Current Number of SWBNO Employees and Vacancies (as of November 2020)

- The Chief Administrative Officer is a new Division established in 2020 that encompasses personnel/departments that are
  no longer managed under current Divisions as well as previously established Divisions that are now disbanded (i.e.,
  Continuous Improvement (Continuous Improvement Division) Info Systems Administration (CFO Division), Human
  Resources (Administration Division), Security (Security Division).
- 2. The Chief Financial Officer now includes the Economic Disadvantage Business Program and Procurement Departments (previously under the dissolved Logistics Division).
- 3. The Chief Customer Service Division is a new Division established in 2020 that does not currently have reporting departments under its management.
- 4. The General Superintendent/Operations Division includes Support Services (previously under the Logistics Division) and the JIRR, Environmental, and Engineering Departments (previously under the Deputy General Supt./Construction Division).

As SWBNO manages personnel per the City's Civil Service Department, employees eligible for retirement can opt to enter the Deferred Retirement Option Plan (DROP) program. The DROP program allows employees that are eligible for retirement to continue working while receiving their normal pay and retirement pay for up to five years. This benefit allows SWBNO employees to save additional money before terminating their employment with SWBNO. A benefit for SWBNO is that the organization can begin planning for the departure of the employee. Currently, there are approximately 82 employees of SWBNO that are on DROP. There are an additional 146 current employees that are eligible for retirement. Thus, approximately 17.7 percent of SWBNO's current workforce is on DROP or eligible for retirement.

The pending retirements facing SWBNO are not unique to SWBNO. Utilities across the U.S. face similar challenges as the workforce developed to manage and operate utilities during growth years approaches retirement age. In addition to pursuing replacements for the identified vacancies above, SWBNO has an initiative that will help mitigate the impact of the pending retirements such as:

Training—SWBNO conducts training through approved online, on-site and off-site courses. The training courses include various classes on business administration, clerical, time management, diversity and communications, process and change management, and leadership. Managers in SWBNO identify classes for their employees and submit the list to the Personnel Department, coordinating and managing the suppliers' training. Additionally, the operating divisions under the General Superintendent's Office maintain training regimens related to their specific focus areas. Since operational positions require annual training credits to maintain Louisiana State

certification, the operating units obtain specialized training outside. Personnel handles all training.

# 3.2 Key Operating Units

As seen in the organizational chart, the key operating units of SWBNO fall under the General Superintendent's supervision, who reports directly to the Executive Director. The following sections provide an overview of key water operating units and the major assets for which they have responsibility.

## 3.2.1 Operations

The Operations Department (Operations) within SWBNO consists of four separate units. These include Purification, Sewerage and Drainage Pumping, Water Pumping and Power, and Sewage Treatment. Operations coordinate with several other departments, including Facility Maintenance, Networks, Plumbing, Environmental Compliance, and Engineering, to plan and perform maintenance related to SWBNO's key assets.

#### 3.2.1.1 Water Purification

The Water Purification unit is responsible for the treatment of all drinking water supplied by SWBNO. This is accomplished at two purification plants, the Carrollton WPP and the Algiers WPP. The Carrollton WPP is the larger of the two and primarily serves the portion of the SWBNO service area on the East Bank of the Mississippi River. The operating capacity of the Carrollton WPP is 232 million gallons per day (mgd). The Algiers WPP is located on the Mississippi River's West Bank and has a current operating capacity of 24 mgd.

Key responsibilities of the Water Purification unit include treating water that meets all parameters of the Safe Drinking Water Act (SDWA); controlling the rate of flow into the plants to assure the quantity of water is sufficient to meet system demand; operation of the laboratory to conduct process control sampling as well as compliance sampling; management of various chemicals used in the treatment process; general maintenance of treatment facilities, including backwashing of filters, painting, and other miscellaneous activities.

Another key function of the Water Purification unit is to monitor the raw water coming down the Mississippi River for any potential organic contaminants. This responsibility includes participating in the State of Louisiana Department of Environmental Quality (LDEQ) program for Early Warning Organics Contamination Detection System (EWOCDS). This system consists of monitoring stations equipped with sensors for detecting organic contaminants. If organic contaminants are detected, LDEQ, through the Louisiana Department of Health and Hospitals, notifies downstream utilities so they can prepare and utilize treatment options for the removal of organic contaminants.

#### 3.2.1.2 Water Pumping and Power

The Water Pumping and Power unit (Pumping and Power) is responsible for the operation of SWBNO's power plant located at the Carrollton WWP. This power plant is primarily a 25-cycle plant that powers SWBNO's drainage pump stations and parts of the water purification plants. In addition to the power plant, this unit is also responsible for operating the major pumping assets that supply drinking water to SWBNO's customers such as the Panola and Claiborne high service pump stations and high service Pumps A and B in the power plant at the Carrollton WPP. Additionally, this unit controls the low lift pumps that pump water from the river intakes to the two purification plants.

Electricity is a critical component for the provision of all water, sewerage, and drainage service. During an emergency, the power station uses steam produced from onsite boilers to power three turbines that produce electricity to keep the drainage pump stations up and running during a flood event or other disaster. There is an additional turbine that uses natural gas or diesel fuel also to supply 25 cycle power. The combined capacity of these four turbines is approximately 61 megawatts (MW). There is also a 60 cycle, 15 MW power turbine near the power plant. This turbine will provide redundancy to stations that rely on 60 cycle power provided by the local electricity provider, Entergy. The turbine will have a feed line from it to Drainage Pump Station No. 1, a key pump station that serves the downtown portion of the drainage service area.

## 3.2.2 Facility Maintenance

The Facility Maintenance Department (Facility Maintenance) provides technical maintenance service to various critical assets owned by SWBNO. Facility Maintenance has four units: (1) plant maintenance, (2) welding and fabrication, (3) electrical maintenance, and (4) mechanical maintenance and meter shop.

Work performed by Facility Maintenance is coordinated and tracked through SWBNO's Cassworks® work order maintenance system. This work includes cleaning and inspection of water treatment basins; welding and fabrication of various mechanical parts necessary for SWBNO's critical power and pumping equipment; electrical maintenance on the power delivery assets and electrical equipment at pumping and treatment facilities; maintenance on pumping motors and associated equipment; and testing and maintenance on SWBNO's customer meters.

The work performed by Facility Maintenance requires significant specialized technical skills as much of the SWBNO equipment related to the power plant, steam pumps, and other older equipment cannot be replaced with the same equipment and, therefore, must be maintained and repaired in house. In 2018, Human Resources closed all vacant positions but left only a few open for highly skilled, experienced labor such as welding and fabrication, electrical, mechanical maintenance. Finding qualified candidates is a challenge for the SWBNO. The residency requirement and pay scales are cited as a major problem for hiring and retaining experienced, permanent staff, especially higher-level skill crafts.

During the field visit in October 2020, about 22 percent of the maintenance employees were eligible for retirement or eligible to retire within five years, with three already pending retirements in 2020. Thirteen positions, mostly high-level senior supervisors, are in the DROP program and could leave in the next five years. To combat this situation, SWBNO hired staff and positioned others in succession. Despite the efforts, it was noted that overtime is necessary to compensate for the limited workforce. The amount of overtime for each department cannot exceed 750 hours, or it must request a waiver. Facility Maintenance did exceed its overtime limit in 2019. This department uses a labor contract, and those contract staff must take the same performance test.

#### 3.2.3 Engineering

The Engineering Department (Engineering) includes Mechanical Engineering, Electrical Engineering, Civil Engineering, Construction Administration and Inspection, and Networks Engineering. Engineering administers major contracts for all projects related to SWBNO facilities and coordinates with other agencies and consulting engineers to design and construct SWBNO capital improvements. The engineering staff works closely with the various Operations units. These close ties promote the effective execution of critical projects necessary to keep operations and processes working and producing the services for the community.

Major areas of responsibility for Engineering include:

- The internal design of systems such as replacing sewer lines or water distribution mains that serve the Orleans Parish;
- Review of design packages from outside engineering firms that are related to SWBNO facilities;
   and
- The inspection of projects currently under construction.

During the field visit in October 2020, Engineering was managing 339 project contracts for FEMA and capital improvement projects. To supplement the existing Engineering staff, SWBNO has been seeking qualified firms with expertise in specific areas to assist with designing and implementing the various projects. This approach will shift much of the design of proposed projects to the outside engineering firms, with SWBNO engineers providing program management.

#### 3.2.4 Networks

The Networks Department (Networks) is responsible for maintaining water's transmission and distribution system, sewer and drainage's collection system, and responding to customer service requests routed via the Revenue and Customer Service employees using Cassworks. Major areas of responsibility for this unit include:

- Leak Detection—The Networks Department leads this initiative to identify and repair leaks in the water distribution system. SWBNO has been using firms with experience in leak detection and the associated leak detection technology to survey various water distribution sections.
- System Inspections—Networks is responsible for inspecting the various water, sewer, and drainage systems. This includes manholes, pressure relief valves on force mains, exercising water distribution valves, closed-circuit television sewer inspections, and inspection of fire hydrants.
- Technical Services—Networks has engineers within its technical services group that focus on managing network-specific projects. These projects mainly include pipeline replacement projects.
- Customer Response—This includes service issues that impact customers, such as main breaks, low pressure, or other water distribution events or sewer systems that impact customer service.

To complete these various tasks, Networks distributes its employees into seven zones of operation. Employees assigned to Zones 1, 3, 4, 5, and 6 are responsible for maintenance and inspections within a specific geographical zone of SWBNO's service area. Employees assigned to Zone 2 operate the barricade unit that provides safe lane closures and visibility for Networks' work areas and focuses solely on preventative maintenance tasks across the entire service area. Employees in Zone 7 provide limited surface restorations following repair excavations by Networks' crews, conducts sewer video and manhole inspections, and provides staff for after-hours crews that respond to emergency calls for service. To supplement these employees, Networks maintains agreements with contractors to assist with larger replacement work.

Another important SWBNO initiative where Networks plays a key role in the water line repair and sanitary sewer system rehabilitation projects. SWBNO coordinates with the City's Department of Public Works (DPW) to conduct these rehabilitation projects concurrently as DPW is rehabilitating streets and sidewalks. Networks, as well as other SWBNO units, provide input and coordination for the scheduling of

these projects to prevent both entities from unnecessarily tearing up the street or disrupting traffic on two separate occasions.

#### 3.2.5 Plumbing

The Plumbing Department (Plumbing) is responsible for plumbing code enforcement and inspection of new residential and commercial connections to the SWBNO sewer collection and water distribution network. Areas of code enforcement include installing relief valves, backflow preventers, and avoiding cross-connections with SWBNO's system. Additionally, Plumbing plays a key role in compliance with the consent decree. SWBNO is required to report any identified sewer overflows on private property. When Plumbing identifies a defect that causes a sewer overflow on private property, a letter is sent to the property owner informing them that a plumber must be retained to fix the defect to prevent further issues. These work activities are reported quarterly as part of the Consent Decree compliance.

#### 3.2.6 Environmental Affairs

The Environmental Affairs Department (Environmental Affairs) oversees several critical functions for maintaining and reporting compliance with the various permits held by SWBNO. While the operating units of SWBNO are responsible for complying with the various permits' parameters, Environmental Affairs assists in reporting and tracking to ensure the timely submission of the required information to regulatory agencies. Key permits monitored by Environmental Affairs include:

Title V Air Permits—There are two main permits for SWBNO's operations, including the power plant at the Carrollton WPP and the incinerator at the East Bank Plant. Additionally, SWBNO maintains backup generators at many facilities. Environmental Affairs has led the initiative to have these generators registered with the LDEQ.

In addition to monitoring the permits above, Environmental Affairs also tracks other environmental requirements related to underground storage tanks and participates with the operating units to track and comply with the consent decree.

## 3.2.7 Support Services

Support Services falls under the General Superintendent's purview; it provides various maintenance and support functions for the operating departments. Several of these support functions include:

- Fleet Management—SWBNO, through Support Services, manages the fleet of vehicles used by the various other divisions. The fleet consists of regular passenger vehicles and utility trucks and larger vehicles such as vacuum trucks and trucks equipped with portable hydraulic equipment for operating valves throughout the system. Currently, there are approximately 954 pieces of rolling stock managed by Support Services. All preventive maintenance is performed on the fleet by Support Services. Repairs to equipment are done both internally and via contracted maintenance.
- Maintenance—Support Services provides grounds maintenance for many of the properties owned by SWBNO. For example, grounds maintenance at the sewage pump stations and other similar facilities. Additionally, Support Services provides services for controlling vegetative growth along the drainage canals and general maintenance such as janitorial services and miscellaneous repair to building facilities.

Additional responsibilities that fall under the purview of Support Services include control of the warehouse, including the tracking and inventory of field supplies and equipment used by SWBNO.

# 3.3 Administrative and Support Units

As seen on the organizational chart, the units that provide administrative and support functions for the SWBNO report to specific Chief Officers and the Executive Director. Key functions include finance, planning and budget, information systems support, customer service and revenue collection, legal, purchasing, and other critical areas necessary for helping SWBNO perform its mission. The following sections provide an overview of several key Departments and their current initiatives.

# **3.3.1** Finance

The Finance Administration Department (Finance) is responsible for several important functions of SWBNO, including the following:

- Preparing monthly financial statements;
- Processing employee payroll;
- Managing receipts from customers, as well as disbursements to employees and vendors;
- Managing the annual audit process;
- Overseeing pension fund;
- Monitoring and preparing the annual report on debt service coverage;
- Inventory control; and
- Managing a short-term investment portfolio

Financial reporting is a critical function of Finance. Every month, this Department prepares an overview of the financial condition of SWBNO for presentation at the monthly regular Board meeting. Preparing these monthly reports promptly is difficult due to the deficiencies of the existing financial reporting system. Finance anticipates that in 2020, the process to modernize the financial reporting system will begin upon the issuance of a request for proposal.

Finance also handles year-end auditing and financial reports. The Continuing Disclosure agreement requires that SWBNO file the audit by August 1<sup>st</sup>, which includes the completion of the audit and production of the Comprehensive Annual Financial Report. The end of the financial reporting year is December 31st. Staff indicates that SWBNO has consistently received the Certificate of Achievement for Excellence in Financial Reporting for its annual financial statements, except for three years: (1) aftermath of Hurricane Katrina and (2) in 2017 and 2018 after implementing the customer information system.

Finance manages the payroll process for SWBNO. At this point, the process is still manual. Time cards are collected from the various divisions and input into the payroll system. Payment is disbursed to employees electronically to their respective accounts on a weekly or bi-weekly schedule. SWBNO is awaiting upgrades to the human resource system to allow for a more automated process.

Other critical responsibilities handled by Finance include managing accounts receivable, accounts payable and the various investments of SWBNO. Staff processes account receivables associated with miscellaneous revenues such as grants, FEMA reimbursements, and City refunds not handled by Revenue & Customer Service. Staff also processes accounts payable to vendors. The target is to process payments immediately after approval by the appropriate authority. Investments are made in short-term instruments such as the Louisiana Asset Management Pool and money market accounts. Finance is also

responsible for deposits to and disbursements from the pension fund. It retains an actuary annually to assess the fund value as part of the annual audit process.

Another responsibility of Finance is to conduct an inventory count of equipment for the SWBNO warehouse with a contracted professional counter company's assistance. This work consists of performing a physical count of equipment in the warehouse and cross-referencing it to forms that must be completed before reception or release of the equipment. The purpose of this inventory is to assure that SWBNO equipment is managed responsibly and used for its authorized purpose.

## 3.3.2 Planning & Budget

The Planning & Budget Department (Planning & Budget) is responsible for developing the annual budget that by law must complete by December 31st each year for the coming year.

The annual budgeting process consists of developing both operating and capital budgets. The normal operating budgeting process begins in July of each calendar year. At that time, Planning & Budget submits a budget package to the Department heads that shows the actual spend versus budgeted amounts for the current year to date. The Department heads then perform their internal analysis to review the current budget, spend to date, and ongoing operations to provide Planning & Budget to assess budget changes for the coming fiscal year.

Planning & Budget reviews the Department heads' budget information for reasonableness and then inputs it into the AFIN financial system. Planning & Budget develops the budgeted projection of water, sewer, and drainage revenue for SWBNO. The revenue and requested operating budget are compared to determine whether enough funds are available to meet the budgeted costs. The Department heads then meet in person with Planning & Budget and the Executive Director to review their requested budget and make final adjustments as necessary.

Planning & Budget manages the capital budget, receives capital requests from all departments, prioritizes projects, and dictates which utility the project supports. Planning & Budget determines the funding source and whether it will be paid from SWBNO funds, FEMA funds if it meets specific requirements or another source. Planning & Budget takes this capital budget and analyzes it to determine whether there is enough revenue or funds on hand to complete the project. If there are not enough funds, Planning & Budget marks the project as unfunded, and the project reverts for consideration during next year's capital budget cycle.

Additional initiatives that Planning & Budget is involved in include strategic planning, support of bond issuance, and tracking actual versus budgeted spend for the various departments.

#### 3.3.3 Revenue & Customer Service

The Revenue & Customer Service Department (Revenue & Customer Service) provides the day to day interface with SWBNO customers, which include operating the call center on a 24 hour/7 days basis and staffing the lobby customer service and payment centers. As this department's title indicates, the two core functions provided are 1) revenue, which includes meter reading, billing, and collection functions, and 2) customer service, which includes assisting customers with general payment and service issues.

Customer service is generally accomplished through the call center's operation and lobby customer service center located at St. Joseph Street. SWBNO also maintains a customer service center located in Algiers on Behrman Place. Normal operating hours are from 7:00 AM to 7:00 PM, with the emergency

group handling any calls after hours. At the same time, as a part of Revenue & Customer Service, the emergency group is set up to handle customer service issues that require a time-sensitive response from SWBNO. A key reason for this group's existence is to comply with SWBNO's consent decree, which requires reporting the date and time of SWBNO's response to an unauthorized discharge from the sanitary sewer system. Most calls received by the call center are related to billing issues.

Revenue collection occurs through several means: mail service, in-person payment at SWBNO payment location, third-party payments via Fidelity Express, by phone, and/or online. Customers may make payments using cash, personal check or credit card. Revenue & Customer Service still collect sanitation charges for the City's Sanitation Department and forwards the revenue to the City. The collection of the drainage system revenue is via the property tax collected by the City. Any revenue collected by the City is forwarded to SWBNO.

Revenue & Customer Service staff acknowledges that customer billing and meter reading have been the most challenging aspects of their operations in recent years. The challenges consist of:

- 1. With the implementation of the new CSM system in 2016, there had been a problem with high and estimated bills. The new billing system relied on historical usage per day when bills needed to be estimated or a set usage per day when there was no historical usage. SWBNO has since changed the process of how it calculates estimated bills. The new process involves:
  - Take your ten previous readings, two of which are required to be actual readings (not estimates)
  - Calculate how many gallons of water you use each day on average, then
  - Multiply that by the number of days in the present billing period.

While the estimated high bills have decreased over time, SWBNO has many open investigations for billing discrepancies. In 2019, on average, there were 1,452 open investigations at any given time. SWBNO manages to resolve over 99.7 percent of the investigations. The goal is to keep the open investigations to below 2,500.

2. Revenue & Customer Service has experienced difficulties maintaining an appropriate number of meter readers to read all of the customer meters on a regular basis. In the past, this was largely due to weather events, however, it has been exacerbated in 2020 due to COVID-19. The SWBNO has hired Olameter to provide more meter readers alongside SWBNO meter readers and has also approved increasing meter reader pay and providing monetary performance-based incentives.

Another challenge mentioned by staff is the communication between the customer service call center and operations when service issues occur in the system. The main issue appears when a service issue such as an outage occurs due to a main break or other reason. In these instances, the call center struggles to provide customers with timely updates on the outage and service restoration timing status. This communication is greatly improved for planned outages as the call center receives a text from the community relations staff that provides pertinent information to relay to customers.

The call center has access to the Cassworks® work order system, which allows it to initiate service requests to be performed by operations. However, Cassworks® does not provide any additional information or functionality to allow a call representative to update a customer inquiring about an open service request. While Revenue & Customer Service has begun to take a more proactive approach by

seeking answers from operations and contacting customers before the customers call back to inquire, the problem will remain until SWBNO can replace the Cassworks® system.

## 3.3.4 Information Systems

The Information Systems Department (Information Systems) buys and manages the software and hardware technology systems that support SWBNO's operations. Information Systems performs its responsibilities via a contract with Avenu Insights & Analytics, LLC (Avenu). SWBNO has used contract services since approximately 1988. Through Avenu, SWBNO supplements its staff with 21 employees of Avenu and 20 employees of Major Services. Most of the contract with Avenu is related to providing O&M activities such as Help Desk assistance for employees, personal computer technicians and programming support of the existing software. The other major part of the contract deals with supporting activities related to implementing new systems to replace the current systems. The contract with Avenu was recently renewed for one year with four (4) one-year renewal options.

SWBNO has begun the process of replacing several of its most important business technology systems. The first replacement was the Customer Account Management (CAM) billing system. The original system was in place since approximately 1988 and was a Common Business Oriented Language (COBOL) batch system developed in-house and used to bill for water and sewer service. In 2016, SWBNO selected the Cogsdale® Customer Service Management system to replace the CAM billing system. The system went live in October 2016. Soon after the implementation, SWBNO experienced a high amount of billing irregularities. After investigating the source, SWBNO found two problem areas: 1) the actual meter reading process and 2) the billing review process. SWBNO has contracted with Olameter to supplement the department with additional meter readers so that meters are read on a regular basis to prevent high and unpredictable bills. SWBNO has also implemented more billing staff training and has worked with Cogsdale® to improve the billing system.

Information Systems replaced its human resources system. The previous human resource software system had been in place since the mid-1990s. The old system included payroll, position control, worker's compensation and personnel management functions. Information Systems replaced the existing system with Microsoft Dynamic Great Plains System, which was implemented by Cogsdale<sup>®</sup>. Despite this update, the timesheet process is still a manual and paper-driven process, but SWBNO is working with Cogsdale<sup>®</sup> to automate the process in 2020. The system went live in December 2018.

Information Systems is starting to focus on replacing its financial system. Information Systems is looking at different financial management systems but has not decided on the vendor to date. The existing financial system, which is a COBOL-based program installed in approximately 1994, includes modules for managing the budget, tracking fixed assets (including inventory control), and performing accounting and purchasing functions. Individuals with knowledge of COBOL-based programming for the system is limited; therefore, Information Systems is taking prudent steps to plan for a replacement financial system. The replacement is expected to proceed during the 2021-2022 timeframe.

Another IT system managed by Information Systems is the Cassworks® system used to create and complete field service work orders. While Cassworks® appears functional for initiating and completing basic field service work orders, it lacks the functionality that would allow SWBNO to begin an enhanced asset management program. Thus, Information Systems expects to prepare a move to an asset management system. The replacement of this system will take approximately three to five years as it will be a complete replacement of the existing system with new technology.

In addition to the major systems noted above, Information Systems also is responsible for several other SWBNO initiatives, including the following: Personal Computer management and support; the housing of Geographic Information System software; smartphone tracking and management for eligible employees; security cameras; and records and data management.

## 3.3.5 Emergency Management

The Emergency Management Department (Emergency Management) is primarily responsible for the planning associated with ensuring that SWBNO can provide adequate water, sewer, and drainage service to customers during hazardous events while minimizing the cost and damage to property from such events. This includes planning to ensure that employees and critical assets are prepared to perform during hazardous conditions. There are five full-time employees in Emergency Management, with three part-time employees. The Division Director/Chief of Security is a certified emergency manager that has been at SWBNO for almost 25 years.

To prepare for future incidents that may disrupt water, sewerage, or drainage service, Emergency Management completed a Hazard Mitigation Plan in 2018. The plan evaluates various potential occurrences such as hurricanes, earthquakes and floods to their potential for disrupting normal service to SWBNO's customers. The plan then includes recommendations to mitigate the impact of the potential occurrences. Examples of mitigation include storm-proofing of critical pump stations or installing backup generators to ensure power delivery during a disruption of power. The Hazard Mitigation Plan is compliant with FEMA Hazard Mitigation Grant Programs (HMGP) and the Disaster Mitigation Act of 2000. Consequently, SWBNO is eligible to apply for available FEMA grants should recovery be necessary. As seen in the CIP, there is significant funding for projects related to FEMA.

Emergency Management also maintains an emergency management plan that is reviewed annually, primarily before the typical hurricane season, to ensure that managers are familiar with the plan of action should an emergency occurrence disrupt normal operations. The emergency management plant is available through an in-house app developed for smartphone operating systems.

#### 3.3.6 Personnel Administration

The Personnel Administration Department (Personnel) manages the personnel administration for SWBNO. The general responsibilities of Personnel consist of the following:

- Recruiting and hiring
- Benefits administration
- Promotions, transfers, retirements, and terminations
- Training
- Tuition reimbursement program
- Retirement Administration

Employees of SWBNO are generally subject to the same civil service rules that govern employment with the City of New Orleans. This includes job classifications and pay scales for water, sewer, and drainage employees commensurate with other City job functions. The City's Civil Service Department is responsible for administering the civil service policies of the City, including procedures for SWBNO to request the filling of vacancies, hiring of new employees, as well as other personnel functions. This process inhibits SWBNO's ability to hire vacancies directly. Still, Personnel has been proactively

recruiting at local job fairs to attract future employees who must apply through the City's Civil Service Department.

Personnel has begun to take a proactive stance on managing employee training for SWBNO again. They assist with arranging mandatory training, coordinating training through the City Civil Service Department, local community colleges and other venues, reimbursement and travel arrangements, and new hire orientation. Recently, SWBNO established the  $H_2O$  Academy to provide a wide range of training opportunities such as leadership essentials, OSHA, business and professional writing, time management, project management, CPR, etc. These classes are offered on-site or at the Delgado City Park Campus. SWBNO tracks employee training. The General Superintendent's office recommends more technical and operator-focused training, which is managed by Personnel.

The succession planning initiative remains an open priority for Personnel. This includes developing succession plans and performing knowledge transfer for all managerial positions. Personnel is developing a Career Pathway Program to help employees progress through their careers. This is particularly important for individuals that are in the DROP program or eligible for retirement.

## 3.3.7 Purchasing

The Purchasing Department (Purchasing) provides a unified purchasing system that ensures integrity and fairness, with centralized responsibility for oversight of solicitation, vendor selection, negotiation, award, contract management, reporting and emergency event support for the benefit of the SWBNO. Purchasing is responsible for procuring supplies, materials, and contractual services for all user agencies of the Board, which is the governing authority. The Board established the centralized purchasing system and implemented the process through resolutions, ordinances, statutory requirements and regulations established by the Purchasing Director through the Chief Financial Officer.

Federal and state requirements and local ordinances, policies and procedures, create the legal framework for Purchasing activities. The primary legal references are included in La. R.S. 38:2211-2296, La. R.S. 33:4084-4085, and 2 CFR 200, sections 200.317-200.326 of the Federal Uniform Guidance. In 2018, Purchasing processed approximately 66 formal sealed bids, request for proposals (RFP) or request for qualifications (RFQ) totaling approximately \$48,833,786. In 2019, Purchasing processed approximately 43 formal sealed bids, RFPs or RFQs totaling approximately \$44,476,407.

The challenges currently facing the Purchasing Department fall into the following categories:

- Technology
- Strategic Sourcing
- Spend Management
- Supplier Relationship Management

Currently, Purchasing utilizes a 25+-year-old legacy system that is mainly paper-based driven. As a result, the actual lead times and the procurement cycle tend to be considerably longer than anticipated or scheduled. To make sound procurement decisions, Purchasing needs accurate and reliable data when determining appropriate procurement strategies. Making purchases based on inaccurate procurement data leads to inventory shortages, excess inventory, and other additional procurement challenges that have the potential to impact SWBNO's budget negatively. The procurement process needs to become more strategic and collaborative to realize the benefits of strategic sourcing. Additionally, supplier

management is another challenge. Properly identifying the right supplier for keeping track of vendor performance and ensuring a stable supply of quality products is a process that needs to be revamped.

## 3.3.8 Risk Management

The Risk Management Department (Risk Management) is responsible for helping SWBNO managers create a safe working environment for all employees and handle the various insurance claims that arise during business.

To promote a safe work environment across SWBNO, Risk Management conducts inspections of facilities annually to identify workplace hazards. Risk Management then works with onsite managers to mitigate or correct the identified hazards to prevent workplace injuries. Additionally, construction projects and work repair sites are spot-checked to ensure that safe practices are followed, Personal Protective Equipment (PPE) is being used, and workers have the appropriate licensing and training as necessary. Should a safety incident occur, there are two Safety Review Boards (one for auto-related incidents; one for non-auto-related incidents) that review the incident to determine the incident's root cause and responsibility.

Risk Management also oversees claims from third parties that arise during the normal course of business. Claims can arise from various issues such as vehicle accidents, main breaks, or other occurrences. SWBNO is fully self-insured. Thus, Risk Management handles all claims made against SWBNO. This includes obtaining and evaluating damage estimates and working with the Legal Department to deal with any issues that arise from the claims process.

# 3.4 Strategic Plan

In 2011, SWBNO created the Strategic Plan (Plan) for the ten years, 2011-2020, to determine its future direction. The Board of Directors approved the initial Plan in September 2011 and revised the Plan in February 2013. The Plan presented SWBNO's Mission, Vision and Values; Goals and Objectives; Assumptions; Strengths, Weaknesses, Opportunities, and Threats; and Strategies and Tactics.

SWBNO developed the Plan as a means of being proactive. It provided a foundation for management and employees to rebuild or strengthen the assets and performance of SWBNO over the ten years. In 2016, SWBNO experienced a change in executive management, putting a hold on plans and metrics associated with the Plan.

In 2018, SWBNO's amended the Mission to "...providing safe drinking water; removing waste water for safe return to the environment; and draining storm water to protect our community...." It also amended the vision of SWBNO to "...to earn and hold the trust and confidence of our customers and community for reliable and sustainable water services...." SWBNO hired a Director of Strategic Planning to lead the Strategic and Master Planning effort over the next five years.

#### 3.5 Conclusions

Based on the review of SWBNO's organizational and managerial structure, Black & Veatch has reached the following conclusions:

SWBNO is organized effectively to carry out its mission to provide water services to New Orleans' citizens. The organization includes managers who have experience in the critical areas of utility finance, planning, operations, and engineering. Administrative units are tasked with key utility functions such as planning and budgeting, emergency management, human

- resources, and customer service. The operational units consist of departments focused on providing water service.
- The management team consists of individuals with significant water, sewerage, and drainage experience. This experience has been developed internally at SWBNO, other respected major water and sewer utilities, and other City departments.
- Like many other water and sewer utilities across the U.S., the departments that comprise SWBNO face a significant number of pending retirements. Approximately 17.7 percent of current employees are either on the DROP program or are eligible for retirement. These pending retirements pose a significant threat to SWBNO's ability to perform its core operational and administrative functions unless SWBNO fills these positions with a steady influx of qualified replacements. Succession planning and recruitment of qualified employees will be key elements for SWBNO to adjust to the pending retirements.
- SWBNO has several departments that are experiencing critical vacancies, including Operations, Finance and Administrative. SWBNO has made progress with reducing vacancies associated with operations and addressing these vacancies to maintain effective operational and maintenance performance and administrative oversight.
- With pending retirements, current vacancies, and a significant CIP to be implemented, a detailed staffing analysis of the various departments appears to be warranted. The staffing analysis, including assessing the necessary skills and levels by department, can assist SWBNO's management with the efficient replacement of employees and developing revised job descriptions for use with the Civil Service hiring process. SWBNO has started to examine staffing positions, as shown in Table 3-1. The expected budgeted positions remain stable from 2019 to 2020.
- SWBNO has started the process of updating its information systems. In 2016, SWBNO updated the customer information system with the Cogsdale CSM system, and in 2018, Cogsdale implemented the human resource system with a Microsoft Dynamic Great Plains System. SWBNO expects to continue to replace other core information systems, including the financial management and work order management systems, over the next few years.
- SWBNO developed a strategic plan in 2011 to address current and future challenges between 2011 and 2020. The plan included an assessment of strengths and weaknesses and strategies and tactics for strengthening the organization over the coming years. As SWBNO approaches 2020, they are starting to develop and update the strategic plan based on the new challenges facing SWBNO.

# 4.0 Water System

## 4.1 Introduction

SWBNO has been providing drinking water to the City since the early 1900s and serves the surrounding area with clean, treated drinking water from the Mississippi River. Its water system's major elements include three river supply intakes, two treatment plants, storage facilities, and a distribution network. The water system service area is shown in Figure 4-1 on the following page.

# 4.2 Water Supply

SWBNO's water system presently supplies water to New Orleans, located on the east and west banks of the Mississippi River. The Mississippi River supplies a reliable supply of water to meet the greater New Orleans area's demands. As the Mississippi River adjacent to New Orleans is a major commercial shipping artery for various materials, a major risk is that SWBNO must be prepared for spills that could pollute the water source. Thus, SWBNO participates in the EWOCDS run by the LDEQ. This system consists of a series of monitoring stations along the Mississippi River that notifies LDEQ if any of the 60 USEPA listed pollutants are detected in the river water samples. The LDEQ disseminates the information to the program participants via the Department of Health and Hospitals, allowing an early warning of possible pollutants in the water source. The LDEQ maintains EWOCDS equipment at all participating locations; the program participants provide the manpower to collect and analyze the samples.

## 4.2.1 System Capacity

SWBNO delivers water through an integrated raw water intake, treatment, storage, high service pumping, and distribution piping system. The current treatment capacity of the Carrollton WPP located on the East Bank of the Mississippi River is 210 mgd, which is by far the larger of the two plants. The Algiers WPP on the Mississippi River's West Bank has a current treatment capacity of 24 mgd. The Carrollton WPP production has ranged from 130 to 140 mgd since Hurricane Katrina in August of 2005. Before the levee failure caused by Hurricane Katrina, the plant was treating an average of approximately 120 mgd. The Algiers WPP has ranged from 10 to 12 mgd in average day production since the hurricane. Currently, the raw water facilities and treatment plants can meet the current and future demands of SWBNO.

Table 4-1 Water System Capacities

	Raw Water Pumping	Current Treatment	Water Storage Capacity		
	Capacity	Capacity	Treated Water		
Facility	mgd	mgd	mg		
Carrollton WPP	310	210	35.8		
Algiers WPP	55	24	10		
System Totals	365	234	45.8		

mg – million gallons

mgd – million gallons per day

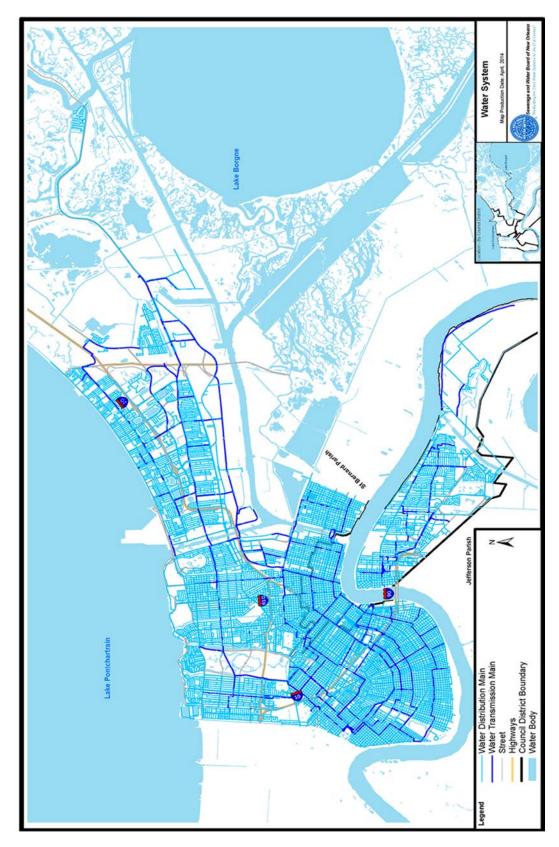


Figure 4-1 Overview of the SWBNO Water System

## 4.2.2 Population

The estimated population for Orleans Parish in August 2005, before Hurricane Katrina, was 463,000. In November 2005, the population was estimated at 138,700 or about 30 percent of the pre-Hurricane Katrina population. On July 1, 2019, the U.S. Census Bureau estimated New Orleans' population at 390,144, or 84 percent of the August 2005 population. As part of its annual report to the USEPA for the consent decree, SWBNO also provides an estimate of New Orleans' population. For the 2019 annual report, the estimated population for the East Bank is 339,689. Combined with the 2018 report on water quality value of 53,547 for Algiers, the City's population is estimated at 393,236, or 84.9 percent of the August 2005 population.

# 4.3 Water System Planning Initiatives and Compliance

Based on staff discussions and a review of annual water quality reports, SWBNO complies with all drinking water regulations. The USEPA promulgated two regulations in 2005 that went into full effect in 2012. SWBNO complies with these new regulatory requirements, as described in more detail below. This section describes SWBNO's water quality initiatives, compliance with present regulations, and planning initiatives and actions to meet anticipated future regulations, water system demands and goals.

## 4.3.1 Regulatory Requirements

The water operations of SWBNO are subject to the requirements of the SDWA of 1974, as amended in 1986 and 1996. The 1986 amendments extended the regulatory agenda of the USEPA to include, among other things, the development of drinking water standards for 90 contaminants, criteria by which surface water supplies would be required to utilize filtration performance standards for disinfection, and the banning of lead-containing materials from distribution and home plumbing systems. The 1996 amendments changed the emphasis of developing rules only slightly. Still, these latest amendments did stress some new issues such as the protection of source waters, annual reports to consumers on the quality of their drinking water, regulation of filter backwash water within treatment facilities, and establishing a state revolving loan fund. Since 1998, several additional rules have been implemented.

- The Interim Enhanced Surface Water Treatment Rule (ESWTR) and the Stage 1 Disinfectants and Disinfection Byproducts Rule (D/DBPR) were promulgated in December 1999 became effective in January 2002.
- The Filter Backwash Recycling Rule (FBRR) was promulgated in May 2001 and became effective in December 2003.
- The Radionuclides Rule was promulgated in December 2000 and became effective in December 2003.
- The Arsenic Rule was promulgated in March 2001 and became effective in January 2006.
- The Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) and the Stage 2 D/DBPR were promulgated in January 2006 and became effective in March 2006 with full compliance required in April 2012.
- The Groundwater Rule was promulgated in November 2006 and became effective January 2007 but is not relevant to SWBNO, relying exclusively on surface water from the Mississippi River.
- The fourth Unregulated Contaminant Monitoring Rule (UCMR-4) was published in December 2016, with monitoring to begin in 2017 through 2021. The SDWA requires that the USEPA issue

a new list of no more than 30 unregulated contaminants to be monitored by public water systems once every five years.

In addition to the above requirements, the State of Louisiana has recently required utilities to comply with a temporary emergency rule established to prevent the harmful effect of amoeba parasites found in two other water systems in Louisiana. The emergency rule was renewed on March 5, 2014, and effective March 6.

The following sections provide an overview of specific areas of the SDWA and SWBNO's compliance. Concentrations are shown in milligrams per liter (mg/L) and micrograms per liter ( $\mu$ g/L). One milligram per liter is the equivalent of one part per million, while one microgram per liter is the equivalent of one part per billion.

## 4.3.1.1 Consumer Confidence Report Rule

The 1996 SDWA Amendments require SWBNO to issue an annual report on treated water quality to its consumers, called the Consumer Confidence Report (CCR).

**Compliance Status:** SWBNO has done this annually in the format required by the Rule. SWBNO's CCR meets the requirements and provides educational information regarding source water and the water treatment process and information about current initiatives and projects being completed by SWBNO.

## 4.3.1.2 Lead and Copper Rule

The Lead and Copper Rule was promulgated in June 1991. It addresses the control of copper and lead that may leach from home plumbing systems. Compliance with the rule is based upon treatment technique requirements triggered if measured lead and copper levels exceed the action levels of 0.015 mg/L for lead or 1.3 mg/L for copper at more than 10 percent of customer taps sampled. SWBNO adds lime to water to control the rate of metal loss by corrosion in the water supply network, including the internal piping in residences and commercial or industrial facilities.

Compliance Status: SWBNO is in full compliance with this regulation. Based on 2019 results, it achieved a 90th percentile lead level of 0.008 mg/L and 0.002 mg/L for the service areas served by the Carrollton and Algiers WPPs, respectively. It also achieved a 90th percentile copper level of 0.1 mg/L and 0.0 mg/L for the service areas served by the Carrollton and Algiers WPPs, respectively. USEPA uses a 90th percentile action level for the lead and copper rule. This means that hypothetically, a system with ten required samples, would use the ninth highest result to compare to the action levels for lead and copper.

#### 4.3.1.3 Arsenic Rule

The Arsenic Rule became effective on March 3, 2001 and established an MCL of 0.01 mg/L for total arsenic. The compliance date for systems with arsenic levels that exceed the MCL is January 23, 2006.

**Compliance Status:** SWBNO complies with the Arsenic Rule. In 2019, Arsenic levels in the finished water supply were well below the established MCL of 10 ug/L.

#### 4.3.1.4 Total Coliform Rule

The Total Coliform Rule (TCR) was published in 1989 and became effective in 1990. It set goals and limits for the presence of total coliforms in drinking water. It required water systems to monitor for total and fecal coliform at specific locations throughout their distribution systems. USEPA published revisions to

the TCR in February 2013 and minor corrections in February 2014. The Revised Total Coliform Rule (RTCR) went into effect on April 1, 2016.

The RTCR removes the maximum contaminant levels (MCL) for total coliform established under the TCR and focuses more on using detection of total coliform as a means of identifying and addressing potential contamination issues. The rule also establishes criteria that enable systems to transition to reduced monitoring requirements. Such a system creates incentives for better system operation and has the potential to reduce the monitoring burden. The RTCR maintains the MCL for E. coli and the associated required actions.

**Compliance Status:** A review of the annual water quality reports for SWBNO shows compliance with the TCR

# 4.3.1.5 Disinfectants/Disinfection By-Products Rule

This rule regulates levels of disinfectants and disinfection by-products. Stage 1 of the rule was promulgated in December 1998 and became effective on January 1, 2002. Stage 2 of this Rule was promulgated in January 2006 and became effective on March 6, 2006. These rules contain maximum residual disinfectant levels (MRDLs), MCLs for disinfection by-products and a treatment technique for total organic carbon (TOC) removal. The Stage 1 Rule reduced the MCL for total trihalomethanes (TTHM) from 100  $\mu$ g/L to 80  $\mu$ g/L and established an MCL of 60  $\mu$ g/L for the sum of five haloacetic acids (HAA5), another group of disinfection by-products. In addition, MRDLs were established for chlorine (4 mg/L), chloramines (4 mg/L), chlorine dioxide (0.8 mg/L), chlorite (1.0 mg/L), and bromate (0.010 mg/L).

Compliance Status with Stage 1: SWBNO complies with the required MCLs and treatment technique based on a 2019 Water Quality Report review. Both water treatment plants are being operated to achieve TOC removal credits at or above the required running annual average (RAAs). The highest running annual average level of TTHMs at the conclusion of 2019 for SWBNO's two water treatment plants was 28  $\mu$ g/L. For HAA5s, the highest running annual average was 37  $\mu$ g/L. SWBNO complies with the 4.0 mg/L MRDL for chloramines, with the highest running annual average of monthly samples measuring 3.2 mg/L.

Compliance Status with Stage 2: The Stage 2 phase of the D/DBPR began compliance monitoring as of April 2012. This rule maintains the TTHM and HAA5 MCLs at 80  $\mu$ g/L and 60  $\mu$ g/L, respectively, but changes the method of calculating the system annual average from RAAs to locational running annual averages (LRAAs). Per discussions with SWBNO, LRAA concentrations for TTHM and HAA5s are similar to the system-wide averages seen for the Stage 1 Compliance, which would indicate compliance with Stage 2.

#### 4.3.1.6 Enhanced Surface Water Treatment Rule

This rule was promulgated in December 1998 and became effective on January 1, 2002. This Rule lowered the turbidity treatment technique level to 0.3 nephelometric turbidity unit (NTU) in 95 percent of the samples from the previous level of 0.5 NTU. It also set maximum turbidity of 1.0 NTU in the finished water and required continuous turbidity monitors on each filter. The Rule requires that operating procedures be revised, and follow-up investigations are conducted if individual filters are found to exceed specific monitoring criteria.

**Compliance Status:** SWBNO complies with all requirements of this Rule. SWBNO maintained filtered effluent turbidity at levels less than or equal to 0.3 NTU during 2019.

## 4.3.1.7 Long-Term 2 Enhanced Surface Water Treatment Rule

The LT2ESWTR was promulgated in January 2006 and became effective on March 6, 2006, with compliance monitoring to begin in April 2012. Regulatory requirements under the LT2ESWTR are based upon the concentration of Cryptosporidium or E. coli in the source water of individual treatment plants. The Rule required microbial monitoring (2 years of monthly Cryptosporidium and E. coli monitoring) to determine each drinking water treatment plant's average source water Cryptosporidium level. Based on this level, the treatment plants are placed in different "bins" with varying removal and/or inactivation credit requirements, with higher influent Cryptosporidium levels requiring greater removal or inactivation. Utilities must meet their resulting requirements by implementing enhanced treatment practices as defined in the "microbial toolbox." The microbial toolbox defines a range of treatment, prevention or optimization options that utilities can implement to obtain the additional removal and/or inactivation credits required to meet the treatment technique.

**Compliance Status:** Per discussions with SWBNO, the required raw water sampling was conducted to assess the Cryptosporidium levels in the raw water. Based on those results, SWBNO indicates that no additional treatment credits were required.

# 4.3.1.8 Filter Backwash Recycling Rule

The FBRR became effective in December 2003. The recycle streams regulated by the FBRR are filter backwash water, sludge thickener supernatant, and liquids from dewatering processes. The rule requires recycled flows to pass through all treatment plant processes to maintain removal credit for Cryptosporidium. In the case of conventional treatment facilities like those of SWBNO, this requires the return of recycled streams before or concurrent with the point of primary coagulant addition.

**Compliance Status:** The Carrollton WPP includes the ability to deliver water used in the filter backwash process to the beginning of the plant, where it is recycled through the entire treatment process; therefore, it meets the requirements of the FBRR. The Algiers WPP backwash and sludge from the settling tanks are discharged via permit to the Mississippi River.

## 4.3.1.9 Emergency Rule

As mentioned above, the State of Louisiana established a new rule focused on preventing any harmful instances of amoeba parasites entering state water systems. Of focus of this rule is on two areas, including requiring systems to maintain a minimum disinfection chloramine residual of 0.5 mg/L and additional TCR sampling focused on areas of the distribution system with longer residence times. The new rule requires a greater number of TCR samples each month and the reporting of instances where a system's disinfection residual drops below 0.5 mg/L.

**Compliance Status:** SWBNO is in full compliance with this new rule.

## 4.3.1.10 Source Water Assessment Program

The 1996 SDWA Amendments required each state to develop a Source Water Assessment Program, designed to stress protection of the source water prior to treatment. The Source Water Assessment for SWBNO was conducted by the State of Louisiana Department of Environmental Quality and was completed in August of 2001. The Assessment provides information about potential threats or risks related to the source water, including high, medium and low risks to SWBNO's treatment plants. As the intakes for SWBNO are located on the Mississippi River, high threats include spills from barge traffic, storage tanks located adjacent to the river, and chemical plants

**Compliance Status:** As noted above, the source water assessment was completed for both the Carrollton WPP and Algiers WPP in 2001.

#### 4.3.2 Water Accountability

Table 4-2 provides SWBNO's assessment of non-revenue water for the years 2015, 2016 and 2017. SWBNO has a high percent of non-revenue water. Some non-revenue water is considered a loss (leaks), while other non-revenue water is free water, metered and accounted for. Out of the total water produced in 2017, only 28.3% is water sold to customers. The other 74.3% of the water produced is either tracked and accounted for as free metered water (municipal swimming pools, libraries, display fountains, parks and playgrounds, fire department and police department use, etc.), or it is categorized as unidentified leaks, accounted for leaks, or unmetered water used in firefighting or flushing of sewers. Water loss through leaks and unmetered use is the largest category of non-revenue water, accounting for 71.6% of the total pumped water in 2017. This category includes several items, the majority of which is undocumented water loss/leaks in the distribution system. This amount of water results in a significant negative impact on SWBNO's operating costs and revenue.

Some other information about the non-revenue water associated with unbilled authorized consumption:

- The free metered process water category (fountains, municipal swimming pools, etc.) accounts for approximately 2.5% of the total water produced in 2017.
- The free metered process water category accounts for 13.0% of the total water produced in 2017.

Table 4-2 on the following page summarizes SWBNO's non-revenue water for 2015, 2016 and 2017 as it compares to the total system water for each year. SWBNO is in the process of determining non-revenue water for 2018 and 2019, and therefore statistics are unavailable.

		•					
	2015		20	)16	2017		
Category	MG	Percent	MG	Percent	MG	Percent	
Billed Authorized Consumption	15,298	29.8%	12,772	24.8%	15,408	28.3%	
Unbilled Authorized Consumption	8,153	15.9%	7,818	15.2%	8,429	15.5%	
Unauthorized	459	0.9%	383	0.7%	462	0.8%	
Documented Water Loss	782	1.5%	813	1.6%	814	1.5%	
Undocumented	26,608	51.9%	29,781	57.8%	29,357	53.9%	

100.0%

51,301

Table 4-2 SWBNO's Total System Water

A consultant for SWBNO conducted a water audit in accordance with AWWA M36 Manual guidelines for the fiscal year 2008-2017 timeframe. The audit also shows that non-revenue water by volume was

51,568

100.0%

54,471

100.0%

Water Loss/Leaks

Total Water Pumped approximately 71.6 percent in 2017. According to the consultant's report, the Infrastructure Leakage Index, a ratio of annual real losses to unavoidable annual real losses, reflects ratios for SWBNO that are significantly higher than other large U.S. water systems. However, the most recent audit results indicate that the ILI has decreased from 46.0 in 2008 to 36.9 in 2017 or 19.8 percent. SWBNO's goal was to reduce the ILI by 4 points per year to achieve a 5-year target of 22.4 by 2020. Unfortunately, SWBNO still must address the issue of non-revenue water in the SWBNO water system. Several initiatives continue to be conducted, including:

#### 4.3.2.1 Leakage Management

The Networks Department has been employing leak detection technology to seek, find, and fix leaks in the system. This technology includes proactive use of acoustic equipment to identify and subsequently fix leaks as they are discovered. It also has included using SmartBall® technology to survey larger transmission mains for leaks. While SWBNO believes this program has been effective, it has not been able to find significant leaks that would explain the large value of Leaks and Unmetered Use noted in Table 4-2.

## 4.3.2.2 Water Main Replacement Program

Another initiative that SWBNO is pursuing is a FEMA-funded project to replace much of the water distribution system. This project focuses on identifying portions of the distribution system that experience multiple main breaks for replacement. The CIP includes \$248.1 million between FY 2020 and FY 2024 to identify and replace main segments in the water system's East Bank portion.

#### 4.3.2.3 Account Validation

The Plumbing Department is focusing on account validation related to ensuring the proper billing of existing customers. This program reviews accounts in the field to ensure meters are working accurately and accounts are being billed properly.

# 4.3.2.4 New Meters and Advanced Metering Infrastructure Equipment

The determination of non-revenue water depends on metered water leaving the WPPs and metered water at the customer endpoint. SWBNO has included projects in its CIP to fund the installation of AMI of \$45.0 million and associated meters of \$15.3 million between FY 2020 and FY 2024. Internal SWBNO funds would fund this initiative.

## 4.3.2.5 Water Hammer Program

The Water Hammer Program is to address surges within the water distribution system, which damage water mains. SWBNO added two elevated tanks to the distribution system to minimize surges. In addition, high service pumps and piping will be rehabilitated to reduce the impact of water hammer on the distribution system. Improvements include converting the high service pumps to variable speed pumps and improvements to control the opening and closing of major valves. The CIP includes \$57.5 million between FY 2020 and FY 2024 towards water hammer mitigation measures.

## 4.3.2.6 Water Quality Master Plan

In 2015, SWBNO completed a comprehensive Water Quality Master Plan to assess the treatment plants' condition. The assessment was a holistic look at the treatment process and the future needs of New Orleans and surrounding communities and provides guidance for prioritizing CIP projects related to the Carrollton WPP and Algiers WPP, which addressed a 20-year planning need.

#### 4.3.3 Water System Planning

In 2019, SWBNO convened a task force to develop findings and recommendations regarding the best strategies and procedures for managing the sewerage, water and drainage facilities and services in the City of New Orleans. A short-term recommendation was to begin work on project-based master plans for sewerage, water, drainage and power systems. SWBNO is currently in the process of evaluating consultants and further scoping an integrated master plan.

#### 4.4 Water Treatment Plants

The Carrollton WPP and Algiers WPP serve the water system. Both plants utilize water from the Mississippi River. Each plant provides similar treatment, consisting of raw water coagulation, flocculation, sedimentation, disinfection, media filtration, fluoridation and corrosion control. Finished water can be stored at the treatment site for later distribution or discharged directly to the distribution system. Portions of the Carrollton WPP date from the early 1900s. The last major improvements and additions were completed at the plant in the 1960s. The Algiers WPP was built in the early 1900s, and the last major improvements were completed in the 1990s. The plants have been maintained over the years to ensure quality water for the surrounding community.

## 4.4.1 WPP Staffing

The staffing levels at the Carrollton and Algiers WPPs have consistently produced finished water that complies with federal and state regulations and meets the capacity of the service population. In 2019, there were no retirements, and the department continued to hire more entry-level staff. Ideally, the department would hire experienced operators with certifications, but it has been difficult due to the residency requirements and pay rates.

During the October 2020 field visit, there were 18 operators with a Water Treatment IV license. Out of those operators, five are eligible for retirement, one is retired and works part-time in the filter gallery, and four are currently in the DROP Program. Within those indicated for retirement are key staff in the chemical house and filter gallery and one senior operator at the Algiers WPP. Their replacements are already in the DROP program and will retire within five years, leaving few candidates to promote within the department. In general, there were not enough certified water plant operators to cover all the shifts, and the department was using overtime to ensure compliance is maintained.

#### 4.4.2 Carrollton WPP

The Carrollton WPP became operational in the early 1900s. The plant draws water from the Mississippi River. It sends treated water to either the Claiborne Pumping station, Panola Pumping Station, or two steam-driven pumps within the Power Station building. The Carrollton WPP is the larger of the two water plants, with an operating capacity of 232 mgd. Plant production information for the past ten years is shown below in Table 4-3.

Daily Output (MGD)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
AVERAGE	137.1	139.4	137.7	131.1	132.6	130.5	131.6	138.9	138.6	137.0
MAXIMILM	156 5	150 Q	162.2	1/11 Q	157 2	1// 7	212 Q	1/10 2	169.7	163

Table 4-3 Carrollton WPP Annual Plant Water Treated per Day

The Carrollton WPP is currently treating approximately 137 mgd of water despite serving only 84.9 percent of the pre-Katrina population. Leaks in the distribution network are a source of persistent problems as additional unaccounted-for water is also an issue. The water delivery pressure has been consistent throughout the last year at 72 pounds per square inch (psi) to maintain minimum pressure throughout the distribution system.

Based on field investigations performed in October 2020, major accomplishments related to the facility are listed below:

- There have been no violations at the Carrollton WPP within 2019 with respect to meeting drinking water standards.
- The G3 sedimentation basin was in service while the G4 sedimentation basin was out for routine maintenance.
- The L3 sedimentation basin was in service while the L4 sedimentation basin was still out due to leaks that occurred in 2018. L4 was cleaned out in 2019, and a contract was put out for repairs in 2020.
- Two elevated storage tanks were in service. The tanks were built in 2018 and 2019 as part of the water hammer project. A third water tower, Michoud, located in the New Orleans East/Venetian Isles area, was rehabbed and placed into service in 2019 after 14 years of being out of service.
- All chemical systems are functional.

The following are ongoing or needed improvements required at the Carrollton WPP:

- A filter rehabilitation program is in progress for the Sycamore filter galleries and planned for Claiborne filter galleries. Valves, actuators, corroded piping supports, and leaking pipes associated with the filters need to be repaired or replaced. In 2019, 4 additional filters in Sycamore galleries were repaired (the contract is for eight total filters). The Claiborne filter galleries will be completed when funding is available.
- The new filter backwash station started construction in 2018 and was completed and placed into service in 2019.
- A new chemical storage and feed facility design was completed in 2018. This project was scheduled to start construction but is awaiting funding.
- The Oak Street pump station is being replaced, including complete pump replacement and other improvements. Improvements should be completed in 2020.
- It was noted a long-term project was in the design stage for the installation of a second sludge line to the river to add redundancy. It was noted that the line broke in 2019 and 2018, reinforcing the need for redundancy.

The CIP includes various projects to address the above issues, most notably CIP Project #122 seen in Section 5.0 for approximately \$23.6 million from 2020-2024 for work on the Sycamore filters, which are in poor condition.

#### 4.4.3 Algiers WPP

The Algiers WPP began service in the 1900s. The plant was improved several times, including a renovation in the 1980s. The plant draws water from the Mississippi River and serves as the main

distribution point of its West Bank portion. The plant's current operating capacity is 24 mgd. Recent plant production rates are shown below in Table 4-4.

**Daily Output** 2011 2013 2015 2016 2017 2018 2019 (MGD) 2010 2012 2014 11.3 **AVERAGE** 11.3 11.7 11.6 10.4 10.1 9.7 10.3 9.4 9.2

15.6

13.9

17.3

14.0

13.5

13.7

Table 4-4 Algiers WPP Annual Plant Water Treated per Day

16.8

**MAXIMUM** 

15.7

15.5

There have been no violations at the Algiers WPP within 2019 with respect to meeting drinking water standards.

Based on field investigations in October 2020, the following are ongoing or needed improvements required at the Algiers WPP.

15.3

- Clarifier 1 (including adding flash mixing to assist with total organic carbon (TOC) removal) and upgrading the fluoride chemical feed system was under construction in 2019 and will be completed in 2020.
- Filter rehab (valves, filter media, air scour system) is still needed on all filters and is awaiting funding.
- EIMCO clarifiers 3 and 4 are under contract for the replacement of the launder troughs. The troughs and steel structures have significant corrosion and required rehab.
- In addition to the rehab and painting of the EIMCO clarifiers, flash mixing was added to assist with better TOC removal in the clarifiers. The existing clarifiers were modified in 2019 to include an additional mixer near the chemical injection point.
- The fluoride storage and feed system require an upgrade to meet state requirements. The fluoride system will consist of a bulk storage tank, a day tank, and metering pumps, and it will be in an existing sodium hypochlorite generating process room. The removal of the old onsite sodium hypochlorite generation equipment was completed in late 2018 and early 2019. The installation of the new fluoride system occurred in 2019 and will be commissioned in 2020.
- Lime is currently slaked at the WPP. SWBNO is considering replacing the lime equipment pending a decision to change the process (different types of lime) or replace the existing slaking equipment. A study must be conducted to establish which option will be selected.
- The raw water pumping and piping systems need improvements to provide redundancy to the intake system. The SWBNO Engineering Department is specifying new pumps at Old River Intake at Algiers.

The plant is adequate to serve the public but needs funds to address issues within the plant adequately. The abovementioned issues are either included in the CIP or are under consideration by SWBNO.

## 4.4.4 Water Quality Laboratory at the Carrollton WPP

The water quality laboratory conducts daily analyses of river water quality and purified water at the Carrollton WPP and Algiers WPP. Water samples from the distribution network are also analyzed at the laboratory facility. The lab continues to meet the State/Federal mandated analytical requirements of the

water plants and is certified by the Louisiana Department of Health and Hospitals to analyze coliform bacteria.

In addition to coliform analysis, the lab collects samples for protozoan analysis. Other regular analyses include hardness, turbidity, fluoride, ammonia, pH, alkalinity, TOC, dissolved organic carbon, phosphorus, corrosion monitoring, and chlorine residual at different treatment stages. The solids are analyzed for total suspended solids (TSS) and total dissolved solids concentrations. River water and finished water samples are analyzed for volatile organic compounds.

The laboratory maintains its involvement in the EWOCDS program run by the State LDEQ. Management indicates that the EWOCDS program has also been underfunded by the State of Louisiana, which has caused a reduction in sampling and analysis. Telecommunications connect monitoring stations to notify LDEQ if any of the 60 USEPA-listed pollutants are detected in the river water samples. The LDEQ disseminates the information to the program participants, allowing early warning of possible problems. The LDEQ maintains EWOCDS equipment at all participating locations while the program participants provide the manpower to collect and analyze the samples.

The laboratory is currently understaffed with two microbiologists, four chemists, and five technicians. The lab supervisor position is vacant. In 2019, the lab lost four chemists, yet they were able to rehire three plus a lab technician in the same time frame. Some lab instrumentation and equipment are reaching or have reached the end of its service life and need replacement. New fume hoods in the chemistry lab are needed. Repairs have been made to some of the fume hoods, and they are operational. Currently, the lab staff is working toward getting recertification of TOC analysis to perform TOC analysis at the lab facility. SWBNO lost its certification due to a lack of staff to maintain the QA/QC requirements.

# 4.5 Water Pumping and Power

The Water Pumping and Power unit of SWBNO's Operations Department operates the power plant and the low lift and high service pumps that bring raw water to the plants and pump treated water to the distribution systems. The power plant is located at Carrollton WPP. The power plant is currently undergoing significant rehabilitation work related to the FEMA-funded hazard mitigation project. This project consists of storm-proofing the power plant and rehabilitating boilers and turbines to improve SWBNO's ability to provide 25 Hertz (Hz) power to the drainage pump stations and other pumping assets during a hurricane or flood event.

Significant assets managed by Water Pumping and Power include:

- Six boilers capable of producing 650,000 pounds of steam per hour.
- Three steam-powered turbines that produce 25 Hz power. #1 Turbine = 6 MW capacity; #3 Turbine = 15 MW capacity; #4 Turbine = 20 MW capacity. #3 Turbine is limited to 8 MW and is listed as emergency use only.
- One Natural Gas/Diesel powered turbine that produces 25 Hz power. #5 Turbine 20 MW. #5 Turbine is out of service due to an explosion in December 2019, which rendered the unit inoperable.
- One Natural Gas/Diesel powered turbine that produces 60 Hz power. #6 Turbine 15 MW. This turbine serves as a backup to Entergy supplied 60 Hz power.

Five electromotive diesel generators with a capacity of 12.5 MW of 25-Hz power.

Significant high service pumping units include:

- Pump A and Pump B are steam-powered pumps located at the power plant. They are each capable of pumping 40 mgd. Pump A rehabilitated the steam drive to an electric drive in 2019, while Pump B drive rehabilitation is scheduled for 2020.
- The Panola pump station is adjacent to the power plant and includes two pumps (each with 25 and 60 Hz motors) capable of pumping 50 mgd each. The pumps can operate on 25 Hz or 60 Hz power depending on the local electricity provider's availability of 60 Hz power.
- The Claiborne pump station, located at the Carrollton WPP, consists of four pumps (two 60 Hz and two 25 Hz motors) capable of pumping 40 mgd each. Currently, all these pumps are in operation.

The two Carrollton WPP pump stations' intake structures include the Old River Station and the New River Station. The New River Station can provide enough water to the Carrollton WPP. The Old River Station has pumps that are used for backup supply to the Carrollton WPP. The two pump stations cannot be used simultaneously, as the head created by the pumps at the New River Station is too great for the pumps at the Old River Station to overcome.

The Algiers WPP is served by a separate intake structure that can supply all its raw water needs. There are also backup intake pumps from a second station for the Algiers WPP to provide redundancy. In addition to the assets above that serve most of the SWBNO system, Water Pumping and Power also manages power and pumping assets for the smaller, west bank portion of the system. While the West Bank's primary power source is the local energy provider Entergy, there is a generating station at the Algiers WPP that can generate 60 cycle power using diesel generators. The power generation facility can also generate enough power to support operations at the Algiers WPP. This station can also perform a frequency change to convert 25 Hz power supplied from the power plant at WPP to 60 Hz power for west bank treatment and pumping assets.

As mentioned above, there are significant improvements in the proposed CIP related to Water Pumping and Power. A significant project includes the West Substation's construction, a new substation to power the plant using power from the local electric company. The total cost of the project is approximately \$8.0 million from 2020 through 2024.

#### 4.5.1 Central Control

The Central Control Power Dispatching Department (Central Control) is primarily responsible for delivering an adequate supply of board-generated electrical power, the continuous monitoring of the operational status of all electrical switchgear, and the testing of related electrical feeders and equipment. In addition, this department is also responsible for:

- Verifying and enforcing the SWBNO's safety clearance procedures and associated clearances within the power distribution system.
- Monitoring local and regional weather to provide advance warning of storms could affect power generation requirements for the drainage and sewerage systems.
- Coordinating various power supplies, including alternative backup power supplies such as diesel generators and frequency changers.

Central Control plays a vital role in many emergency operational situations. Serving as a hub of communications, Central Control informs the SWBNO's management and senior-level staff of changes in conditions that will affect the SWBNO's ability to provide adequate sewerage, water, and drainage services. Central Control provides valuable information during emergencies, such as hurricanes, floods, freezes, etc., to the Office of Emergency Preparedness through established SWBNO protocols.

It was noted during the site visits that Central Control did not have enough trained and experienced staff. Staffing was cited as the Center's largest issue, and as a result, the department has made training a focus. It was noted that one of the two most senior staff members is in DROP. Therefore, training new staff members is very critical. Staff with more advanced technical skillsets, including instrument and controls technicians, are needed as equipment and new technology is introduced into the system.

## 4.6 Distribution System

SWBNO's distribution system consists of approximately 1,835 miles of main ranging from 1-inch diameter to 54-inch diameter. There is little storage in the distribution system, with the storage located at the treatment plants in-ground storage tanks. The 1,835-mile distribution system's key components also include 30,862 manholes, 30,316 valves, and 23,264 hydrants as of FY 2019.

The Networks Department provides preventative maintenance in terms of investigating leaks, exercising valves, and inspecting hydrants. The type and number of distribution system-related maintenance work orders completed for 2017 through 2019 are shown below in Table 4-5:

TYPE OF WORK ORDER	2017 TOTAL	2018 TOTAL	2019 TOTAL
Investigation of Water Leaks	287	345	212
Water Line Replacement	5	6	22
Water Valves	899	1,210	869
Water Service Lines	8,683	11,005	10,877
Water Mains	1,091	1,220	1,194
Hydrants	572	749	730
Manholes	23	20	19
Total	11,560	14,555	13,923

**Table 4-5** Summary of Distribution Work Orders

SWBNO has continued an evaluation of the water distribution system to detect leaks. Through Networks, SWBNO is trying to extend the serviceable life of the infrastructure by performing upgrades such as lining and full-line replacement and point repairs in the water distribution system. The department has conducted several large-diameter pipe lining projects on critical large-diameter lines that have experienced cracking and excessive corrosion failure. In 2019, multiple water transmission segments were prioritized for lining, but funding limitations have prevented it from being done. The focus is still on maintaining large diameter valves for command and control of the distribution system.

Emergency response times in 2019 were improved. Currently, the average response time for emergency inspectors to get on-site is less than one-hour compared to 3-4 hours previously. The number of complaints received by SWBNO has gone down, which in turn improves customer satisfaction.

The specialized set of knowledge and skills required by Networks necessitates a significant investment in on-the-job training and formal instruction in various subjects such as safe handling of materials containing asbestos, safe excavation and shoring, confined space entry, etc. The internal training program taken on by senior staff has assisted junior staff in passing all four levels of certification exams to obtain licenses. There are over 50 Class IV Collection/Distribution licenses. The program is a great supplement to help ensure staff obtains enough operator licenses to remain in compliance.

The FEMA-funded Water Hammer project and distribution system replacement provides significant funds for improving the distribution system. The 2020 – 2024 CIP reflects approximately \$57.5 million in FEMA funds for this initiative, including \$248.1 million for main replacement. SWBNO's Management indicates that the distribution system replacement is coordinated with City street projects.

# 4.7 Water System Conclusions

Based on the review of SWBNO's water system, Black & Veatch has reached the following conclusions:

- SWBNO has an abundant water supply via the Mississippi River to provide service to existing and future customers.
- SWBNO consistently meets or exceeds state and federal standards for the provision of drinking water. The treatment capacity for the Carrollton WPP and Algiers WPP is enough to meet current and projected demands.
- Overall, SWBNO's water purification plants are adequate and include processes and components that are common in the water industry. The water purification plants need infrastructure upgrades or replacements to sustain reliable operations. Most critical are the Carrollton WPP filters and underdrains, which are in poor condition.
- The amount of non-revenue water, which is water produced by SWBNO but not sold to customers, is well above what is typical for a similar-sized utility. SWBNO is acting to address the issue using several initiatives, including leak detection technology, the FEMA-funded replacement of the distribution system; the FEMA-funded Water Hammer program; meter replacement; and account validation. These initiatives are common techniques in the water industry to identify and reduce non-revenue water and eventually yield improved results over the long term.
- An outside consultant performed a water audit per AWWA guidelines from 2008 to 2017. The AWWA guidelines recommend that a water audit is developed annually. This annual water audit can provide an effective basis for understanding areas of non-revenue water and tracking progress toward reducing the amount of non-revenue water to more typical levels. The most recent audit results indicate that the ILI, a ratio of annual real losses to unavoidable annual real losses, has decreased from 46.0 in 2008 to 36.9 in 2017 or 19.8 percent. SWBNO's goal was to reduce the ILI by 4 points per year to achieve a 5-year target of 22.4 by 2020. There is still progress that needs to be made. SWBNO is currently performing water audits for 2018 and 2019.
- Over the years, SWBNO has developed a redundant power supply to primarily sustain drainage operations during significant emergencies such as hurricanes. The power plant can also provide

power to sustain drinking water low service pumping, treatment operations, and high service pumping during events where the local power source is down. These power assets are unique within the water industry and provide a mechanism for SWBNO to sustain critical operations during significant storm events. SWBNO needs to repair the #5 Turbine that exploded in December 2019.

- Significant FEMA funds were used to rehabilitate and prepare the power assets to provide reliable power during future storm events.
- SWBNO continues to rebuild the water system to recover from the impact of Hurricane Katrina in 2005. The FEMA-funded hurricane recovery projects will rehabilitate or replace significant pumping assets and a significant portion of the water distribution system.

# 5.0 Capital Improvement Program

#### 5.1 Overview

SWBNO's CIP is managed by the General Superintendent's office and reflects the capital items requested by each department within SWBNO. SWBNO process for developing the CIP budget includes a prioritization process to rank order projects for each operational sub-unit, i.e., water, sewerage, and drainage. Generally, the prioritization of capital projects falls to a committee consisting of the General Superintendent, Chief of Engineering, Chief of Networks, Chief of Operations, and Planning and Budget. Projects are ranked on a scale of 1 to 10, with 10 receiving the highest priority implementation by SWBNO. The prioritization process uses criteria that include the following:

- General service criteria for SWBNO are weighted to provide a basis for comparing individual projects. The general service criteria include customer service, regulatory compliance, system reliability, system repair/replacement, operational flexibility, system growth, and several other general service criteria. Criteria related to regulatory compliance and system repair/replacement would generally receive greater weighting than system growth criteria.
- Individual projects are assessed and ranked against each of the general service criteria to derive a weighted ranking for each project.
- Projects that are already underway or have designated funds from other sources, e.g., FEMA funds, typically receive the highest ranking.

The timing and cost included in the CIP are developed by managers using their experience or other information as known to provide a budget estimate for the CIP. The costs do not include any inflation for projects identified in future years. Many of the projects are yet to be designed, at which time a more detailed design will likely result in changes to the CIP amounts before project implementation. From a timing standpoint, individual or specific projects are noted in the year for which SWBNO anticipates initiating the project. For ongoing capital expenditures, e.g., annual renewal and replacement, the CIP shows annual amounts.

# 5.2 Capital Improvement Program

A summary of SWBNO's total 2020-2029 Capital Program needs for the years 2020 through 2024 is shown in Table 5-1. The timing and cost included in the CIP are developed by managers using their experience or other information as known to provide a budget estimate for the CIP. The costs do not include any inflation for projects identified in future years. Many of the projects are yet to be designed, at which time a more detailed design will likely result in changes to the CIP amounts before project implementation. From a timing standpoint, individual or specific projects are noted in the year for which SWBNO anticipates initiating the project. For ongoing capital expenditures, e.g., annual renewal and replacement, the CIP shows annual amounts.

Table 5-1 Capital Improvement Program Needed (Fiscal Years 2020-2024)

Capital Needs (In \$000)	2020	2021	2022	2023	2024	Total Five-Year Program
110 Pumping Stations Improvements	\$3,200	\$3,200	\$0	\$0	\$0	\$6,400
122 Sycamore and Claiborne Filter Rehabilitation	\$8,050	\$4,500	\$2,000	\$5,000	\$4,000	\$23,550
135 Chemical System Improvements	\$11,150	\$0	\$0	\$0	\$0	\$11,150
175 Water Hammer/JIRR Projects	\$136,907	\$115,441	\$103,989	\$2,312	\$0	\$358,648
214 Normal Extensions and Replacements	\$700	\$700	\$700	\$700	\$700	\$3,500
239 Mains DPW Contracts	\$4,400	\$4,400	\$4,400	\$4,400	\$4,400	\$22,000
400/500/600/800 Water Share of Combo Projects	\$19,716	\$28,064	\$20,108	\$8,920	\$10,198	\$87,007
TOTAL WATER DEPARTMENT <sup>1</sup>	\$184,123	\$156,305	\$131,197	\$21,332	\$19,298	\$512,255

<sup>1.</sup> Uninflated costs derived from SWBNO 2020-2029 Capital Budget.

The five-year CIP reflects total capital needs, which is comprised of projects to improve the entire water system. Understanding the constraints associated with funding sources, the five-year CIP for the years 2020 through 2024 has been reduced to reflect projects that already have a funding source identified and can be executed within the budget constraints. Table 5-2 provides a summary of the planned projects anticipated by SWBNO. Many of the remaining projects are focused on rehabilitation, replacement, and upgrade projects.

Table 5-2 Capital Improvement Program Planned (Fiscal Years 2020-2024)

Capital Needs (In \$000)	2020	2021	2022	2023	2024	Total Five-Year Program
122 Sycamore and Claiborne Filter Rehabilitation	\$8,050	\$4,500	\$2,000	\$5,000	\$4,000	\$23,550
175 Water Hammer/JIRR Projects	\$106,907	\$115,441	\$103,989	\$2,312	\$0	\$328,648
400/500/600/800 Water Share of Combo Projects	\$11,555	\$16,514	\$5,448	\$948	\$165	\$34,630
TOTAL WATER DEPARTMENT COMBINED <sup>1</sup>	\$126,512	\$136,455	\$111,437	\$8,260	\$4,165	\$386,829

<sup>1.</sup> Uninflated costs derived from SWBNO 2020-2029 Capital Budget.

Table 5-3 is broken out into three segments to reflect the different funding sources. The first segment reflects projects to be funded by grants. These projects mainly consist of FEMA and hazard mitigation.

The second segment of the table reflects the projects funded by the fair share program. The fair share program was established in June of 2020 between the City, SWBNO and the hospitality industry to provide recurring annual revenue of up to \$26 million to SWBNO projects and infrastructure work. The third segment reflects projects that do not have a current funding source but are expected to be funded by internal SWBNO funds, including bond proceeds and self-generated funds.

Table 5-3 Capital Improvement Program Funding Sources (Fiscal Years 2020-2024)

(In \$000)	Grant Funded	Fair Share Funded	Targeted Funded	Total
Water System	\$338,968	\$47,860	\$125,427	\$512,255

<sup>1.</sup> Uninflated costs derived from SWBNO 2020-2029 Capital Budget.

SWBNO's water system budget is approximately \$512.3 million for the fiscal years 2020 through 2024. Out of the \$512.3 million, \$47.9 million will be funded through fair share proceeds and \$339.0 million through a combination of other sources, including FEMA funds. Also, SWBNO has identified \$125.4 million of targeted capital projects. Black & Veatch recommends that SWBNO continue to pursue these alternative funding sources to make progress towards completing these projects.

The planned projects included for SWBNO's water system include replacing water distribution pipelines, improvements to facilities at the treatment plants (Carrollton and Algiers), and improvements to water pumping stations. Some of the key project spending's include:

- Water hammer hazard mitigation program (FEMA) The budgeted spending is \$57.5 million for the FY 2020 through FY 2024 planning period (project #175-01).
- Replacement of water distribution system on East Bank (FEMA). The budgeted spending is \$248.1 million for the FY 2020 through FY 2024 planning period (project #175-13).
- Improvements to Sycamore filter gallery at Carrollton WPP. The budgeted spending is \$23.6 million for the FY 2020 through FY 2024 planning period (project #122-03).

#### 5.3 Conclusions

Based on the review of SWBNO's water system and associated reports and documents, Black & Veatch has reached the following conclusions:

- SWBNO's Capital Improvement Program appropriately addresses major system deficiencies and initiatives.
- About 75.5 percent of the total CIP noted for FY 2020 through FY 2024 is projected to be funded from other sources, including FEMA, hazard mitigation, and fair share funds. Many of these projects are focused on rebuilding the water system, as well as preparing SWBNO to sustain operations in the future. The fair share program was established in June of 2020 between the City, SWBNO and the hospitality industry to provide recurring annual revenue of up to \$26 million to SWBNO projects and infrastructure work.
- SWBNO is monitors and re-evaluating the CIP prioritization on an annual basis. It is expected that adjustments will occur to CIP projects' costs and timing once SWBNO initiates a more detailed design. The prioritization component of SWBNO's CIP development process provides a logical basis for managing the CIP implementation.

The CIP maintains an aggressive schedule for completing capital projects. SWBNO is qualified to manage the CIP implementation and will continue to retain additional, outside engineering support to complete these projects. An increased focus by SWBNO on program management, purchasing, and project approval processes will be needed to prevent significant delays in completing the CIP.

# APPENDIX E

FINANCIAL CONSULTANT'S FEASIBILITY REPORT



# Sewerage and Water Board of New Orleans, Louisiana

Financial Feasibility Evaluation
of Water System
Taxable Water Revenue Refunding Bonds,
Series 2021



# **February 4, 2021**

Draft 4

# **Evaluation by Financial Feasibility Consultants**

#### Sewerage and Water Board of New Orleans, Louisiana

#### Water System Taxable Water Revenue Refunding Bonds, Series 2021

We have evaluated the accompanying Forecast Statement of Revenues, Expenses, Debt Service, and Debt Service Coverage (the "Forecast Statement") for the Sewerage and Water Board of New Orleans (the "Board" or "SWBNO") Water System for the six years ending December 31, 2020 through December 31, 2025. Our evaluation was conducted in accordance with guidelines for the water industry and included such procedures as we considered necessary to evaluate the assumptions of the Board.

In evaluating the financial feasibility of the bond financing those assumptions that we believe are most significant include:

- Projected revenues from the approved and projected rate adjustments during the six-year forecast period;
- Projected operating costs for providing water services to meet necessary requirements during the forecast period; and
- Funding of \$364 million of water capital projects during the forecast period.

The accompanying Forecast Statement is presented on an accrual basis, and is then adjusted to be consistent with the Board's budgeting process for the Water System, and the specific requirements of the coverage tests identified in the General Water Revenue Bond Resolution ("General Bond Resolution"), adopted by the Board on May 21, 2014 as amended and supplemented to and including the Third Supplemental Water Revenue Bond Resolution adopted by the Board on January \_\_\_\_, 2021 (the "Third Supplemental Resolution" and, together with the General Bond Resolution, the "Bond Resolution"). The Forecast Statement, together with the Summary of Significant Forecast Assumptions, which is included as an integral part of the forecast, constitutes the "Feasibility Evaluation" for the proposed capital projects and bond financing.

In our opinion, the accompanying Forecast Statement is presented in conformity with industry guidelines for presentation of a forecast, and the underlying assumptions provide a reasonable basis for the Board's forecast. Based upon the assumptions in our report, the projected Revenues provide adequate funds to operate the Water System in a sustainable manner, to fund the capital plan, and to maintain the debt service coverage ratios required by the General Bond Resolution during the forecast period for the issuance of the Board's Water System Taxable Water Revenue Refunding Bonds, Series 2021. However, there will usually be differences between the forecast and actual results because events and circumstances frequently do not occur as expected, and those differences may be material. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

Raftelis Financial Consultants, Inc.

Maitland, FL

February 4, 2021

By: Anthony D. Hairston

Vice President

Exhibit 1: Forecast Statement of Revenues, Expenses, Debt Service, and Debt Service Coverage

	Projected Calendar Year Ending December 31,					
	2020 (Est.)	2021	2022	2023	2024	2025
Revenues:						
Operating Revenues:						
Sale of Water and Delinquent Fees [1]	\$114,871,322	\$115,626,250	\$117,842,420	\$120,199,268	\$122,603,254	\$125,055,319
Plumbing Inspection and License Fees	224,483	307,078	307,078	307,078	307,078	307,078
Subtotal: Water Charges and Fees	\$115,095,805	\$115,933,328	\$118,149,498	\$120,506,346	\$122,910,332	\$125,362,397
Other Revenues [2]	\$4,047,840	\$1,725,600	\$1,725,600	\$1,725,600	\$1,725,600	\$1,725,600
Total Operating Revenues	\$119,143,645	\$117,658,928	\$119,875,098	\$122,231,946	\$124,635,932	\$127,087,997
Non-Operating Revenues:						
Interest Income	\$987,419	\$1,076,700	\$1,225,300	\$1,246,000	\$1,237,900	\$1,199,000
Contribution from Other Governments [3]	1,187,759	1,187,759	1,187,800	1,187,800	1,187,800	1,187,800
Other Non-Operating Revenue	290,838	260,626	260,600	260,600	260,600	260,600
FEMA O&M Expense Reimbursement [4]	0	0	0	0	0	0
Total Non-Operating Revenues	\$2,466,016	\$2,525,085	\$2,673,700	\$2,694,400	\$2,686,300	\$2,647,400
Total Revenues	\$121,609,661	\$120,184,013	\$122,548,798	\$124,926,346	\$127,322,232	\$129,735,397
Expenses:						
Operating Expenses [5]	\$84,474,605	\$92,425,158	\$95,516,065	\$98,727,065	\$102,072,065	\$105,538,065
Net Revenues	\$37,135,056	\$27,758,855	\$27,032,733	\$26,199,281	\$25,250,167	\$24,197,332
Senior Debt Service:						
Existing [6]	\$13,473,550	\$1,403,600	\$5,598,600	\$5,598,250	\$5,599,000	\$5,598,750
Proposed Series 2021 [7]	0	3,452,818	7,138,114	7,142,739	7,141,045	7,139,910
Senior Debt Service	\$13,473,550	\$4,856,418	\$12,736,714	\$12,740,989	\$12,740,045	\$12,738,660
Senior Debt Service Coverage [8]	2.76	5.72	2.12	2.06	1.98	1.90
Subordinate Debt Service:						
Future LDH Loan Debt Service [9]	\$0	\$0	\$556,700	\$1,113,400	\$1,670,100	\$2,226,800
Subordinate Debt Service	\$0	\$0	\$556,700	\$1,113,400	\$1,670,100	\$2,226,800

Exhibit 1 footnotes on following page.

Total Debt Service	\$13,473,550	\$4,856,418	\$13,293,414	\$13,854,389	\$14,410,145	\$14,965,460
Total Debt Service Coverage [10]	2.76	5.72	2.03	1.89	1.75	1.62
Rate Covenant Net Revenues:  Less: Transfers from Rate Stabilization	\$37,135,056	\$27,758,855	\$27,032,733	\$26,199,281	\$25,250,167	\$24,197,332
Less: Grants  Adjusted Rate Covenant Net Revenues	\$37,135,056	\$27,758,855	\$27,032,733	\$26,199,281	\$25,250,167	\$24,197,332
Total Debt Service Coverage on Adjusted						
Rate Covenant Net Revenues	2.76	5.72	2.03	1.89	1.75	1.62
Net Revenue After Debt Service	\$23,661,506	\$22,902,437	\$13,739,318	\$12,344,892	\$10,840,022	\$9,231,872
Other Expenditures:						
Revenue Funded Capital	\$34,310,136	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000
Debt Service Reserve (Release) [11]	0	(7,874,550)	0	0	0	0
Total Other Expenditures	\$34,310,136	\$4,125,450	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000
Total Surplus/(Deficit)	(\$10,648,630)	\$18,776,987	\$1,739,318	\$344,892	(\$1,159,978)	(\$2,768,128)
Ending Balance of Available Funds  Days of Cash on Hand	\$22,562,593 97	\$41,339,580 163	\$43,078,898 165	\$43,423,790 161	\$42,263,812 151	\$39,495,684 137
Days or Cash On Fianu	91	103	100	101	101	137

#### **Basis of Presentation**

#### Exhibit 1 Footnotes:

- [1] Sale of Water and Delinquent Fees include all revenues generated from the monthly water charges, including delinquent fees. See Explanatory Note 5 for further details. The forecast shown above assumes the following rate adjustments by year:
  - 2020 and 2021: Rates as adopted as of the date of this report.
  - 2022: 2.0% water rate increase (assumed to be effective January 1, 2022).
  - 2023: 2.0% water rate increase (assumed to be effective January 1, 2023).
  - 2024: 2.0% water rate increase (assumed to be effective January 1, 2024).
  - 2025: 2.0% water rate increase (assumed to be effective January 1, 2025).
- [2] The majority of Other Revenues in 2020 represents payments by vendors for damages during work performed for the Board.
- [3] Contribution from Other Governments are comprised of Fair Share revenue allocated to the Water System.
- [4] As of the date of this report, no FEMA grants are anticipated during the forecast period.
- [5] See Explanatory Note 6 for further detail. Operating Expenses shown herein are comparable to the historical Adjusted Operating Expenses shown in Exhibit 2.
- [6] Further detail on existing debt can be found in Explanatory Note 8.
- [7] Annual debt service for the Series 2021 bonds provided by the Board's managing underwriter on February 4, 2021
- [8] Rate covenant requires coverage of 1.25x on senior debt service.
- [9] Debt service assumes \$10 million per year new SRF loans, starting in 2021 with repayment beginning the year after issuance (i.e., the first SRF loan in 2021 begins debt service in 2022). Debt amortization is assumed over a 20-year period, 1.0% interest rate with one year capitalized interest.
- [10] Rate covenant requires coverage of 1.10x on total senior and subordinate debt service.
- [11] Some or all of the savings to be realized in 2021 may be dedicated to capital and/or other non-recurring expenditures by the Board, which could lower cash balances and days cash on hand as a result.

Exhibit 2: Historical Statement of Revenues, Expenses, Debt Service, and Debt Service Coverage [1]

	Actual Calendar Year Ending December 31,				
	2015	2016	2017	2018	2019
Revenues:					
Operating Revenues:					
Sales of Water and Delinquent Fees	\$78,007,937	\$83,158,940	\$90,464,810	\$90,287,081	\$113,339,213
Plumbing Inspection & License Fees	305,384	319,991	297,115	319,127	293,773
Subtotal: Water Charges and Fees	\$78,313,321	\$83,478,931	\$90,761,925	\$90,606,208	\$113,632,986
Other Revenues	\$3,416,155	\$2,506,704	\$1,707,271	\$1,912,736	\$3,011,749
Total Operating Revenues	\$81,729,476	\$85,985,635	\$92,469,196	\$92,518,944	\$116,644,735
Non-Operating Revenues:					
Interest Income	\$966,949	\$2,104,903	\$1,923,464	\$1,723,942	\$729,371
Contribution from Other Governments [2]	0	0	0	0	6,516,802
Other Non-Operating Revenue	261,126	275,740	264,874	343,336	264,768
Total Non-Operating Revenues	\$1,228,075	\$2,380,643	\$2,188,338	\$2,067,278	\$7,510,941
Total Non-Operating Revenues  Adjustment [3]	<b>\$1,228,075</b>	<b>\$2,380,643</b>	<b>\$2,188,338</b>	<b>\$2,067,278</b> \$8,927,977	<b>\$7,510,941</b>
Adjustment [3]	\$0	\$0	\$0	\$8,927,977	\$0
Adjustment [3]  Total Revenues	\$0	\$0	\$0	\$8,927,977	\$0
Adjustment [3]  Total Revenues  Expenses:	\$0 <b>\$82,957,551</b>	\$0 \$88,366,278	\$0 \$94,657,534	\$8,927,977 <b>\$103,514,199</b>	\$0 <b>\$124,155,676</b>
Adjustment [3]  Total Revenues  Expenses:  Total Operating Expenses [4]	\$0 <b>\$82,957,551</b>	\$0 \$88,366,278	\$0 \$94,657,534	\$8,927,977 <b>\$103,514,199</b>	\$0 <b>\$124,155,676</b>
Adjustment [3]  Total Revenues  Expenses:  Total Operating Expenses [4]  Less Adjustments [5]:	\$0 <b>\$82,957,551</b> \$84,854,293	\$0 \$88,366,278 \$89,478,097	\$0 <b>\$94,657,534</b> \$100,246,946	\$8,927,977 <b>\$103,514,199</b> \$106,424,957	\$0 <b>\$124,155,676</b> \$110,311,595
Adjustment [3]  Total Revenues  Expenses:  Total Operating Expenses [4]  Less Adjustments [5]:  Depreciation	\$0 <b>\$82,957,551</b> \$84,854,293 \$10,414,611	\$0 \$88,366,278 \$89,478,097 \$10,177,757	\$0 <b>\$94,657,534</b> \$100,246,946 \$12,216,937	\$8,927,977 <b>\$103,514,199</b> \$106,424,957 \$12,349,399	\$0 <b>\$124,155,676</b> \$110,311,595 \$12,643,499
Adjustment [3]  Total Revenues  Expenses:  Total Operating Expenses [4]  Less Adjustments [5]:  Depreciation  Pension Non-Cash Expense	\$0 <b>\$82,957,551</b> \$84,854,293 \$10,414,611 1,147,689	\$0 \$88,366,278 \$89,478,097 \$10,177,757 1,809,707	\$0 \$94,657,534 \$100,246,946 \$12,216,937 1,694,490	\$8,927,977 <b>\$103,514,199</b> \$106,424,957 \$12,349,399 4,319,190	\$0 <b>\$124,155,676</b> \$110,311,595 \$12,643,499 3,063,937
Adjustment [3]  Total Revenues  Expenses:  Total Operating Expenses [4]  Less Adjustments [5]:  Depreciation  Pension Non-Cash Expense  OPEB Non-Cash Expense	\$0 \$82,957,551 \$84,854,293 \$10,414,611 1,147,689 2,123,424	\$0 \$88,366,278 \$89,478,097 \$10,177,757 1,809,707 2,000,442	\$0 \$94,657,534 \$100,246,946 \$12,216,937 1,694,490 935,018	\$8,927,977 <b>\$103,514,199</b> \$106,424,957 \$12,349,399 4,319,190 460	\$124,155,676 \$110,311,595 \$12,643,499 3,063,937 2,594,642

Net Revenues	\$11,788,982	\$13,363,687	\$16,819,509	\$22,674,400	\$41,650,263
Total Debt Service:					
Senior Debt Payment	\$3,500,000	\$7,971,525	\$12,640,550	\$13,333,550	\$13,394,550
Total Debt Service	\$3,500,000	\$7,971,525	\$12,640,550	\$13,333,550	\$13,394,550
Senior Debt Service Coverage	3.37	1.68	1.33	1.70	3.11
Net Revenue after Debt Service	\$8,288,982	\$5,392,162	\$4,178,959	\$9,340,850	\$28,255,713
Net Revenue after Debt Service  Ending Balance of Available Funds [7]	<b>\$8,288,982</b> <b>\$39,253,304</b>	<b>\$5,392,162</b> \$38,383,800	<b>\$4,178,959</b> \$29,823,726	<b>\$9,340,850</b> \$38,771,396	<b>\$28,255,713</b> <b>\$33,211,223</b>

<sup>[1]</sup> The data for this schedule is derived primarily from the Board's Comprehensive Annual Financial Reports (CAFRs).

- [5] Adjustments include the deduction of depreciation, pension non-cash expenses, OPEB non-cash expenses, and extraordinary expenses from total operating expenses pursuant to the General Bond Resolution. Extraordinary expenses are those identified pursuant to the definition of "extraordinary, nonrecurring, and non-continuing" in the General Bond Resolution.
- [6] Adjusted Operating Expenses for the historical period are comparable to Operating Expenses for the projections shown in Exhibit 1.
- [7] Ending balances shown include unrestricted and undesignated cash and cash equivalents, cash and cash equivalents designated for capital projects, other designated cash, and deposits.

# SEWERAGE AND WATER BOARD OF NEW ORLEANS SUMMARY OF SIGNIFICANT FORECAST ASSUMPTIONS

# FOR THE SIX YEARS ENDING DECEMBER 31, 2020 THROUGH DECEMBER 31, 2025

#### 1. Basis of Presentation

Raftelis Financial Consultants, Inc. ("Raftelis") has been engaged by the Sewerage and Water Board of New Orleans (the "Board" or "SWBNO") to evaluate the financial feasibility of proposed improvements to its Water System. The opinion letter to the Board is based upon the Forecast Statement of Revenues, Expenses, Debt Service, and Debt Service Coverage (the "Forecast Statement") and the Summary of Significant Forecast Assumptions (taken together, the "Feasibility Evaluation") which presents, to the best of the Board's knowledge and belief, based

<sup>[2]</sup> Contributions from Other Governments consist of "Fair Share" revenue from the City of New Orleans for infrastructure funding. Such funding is considered as a revenue for debt service coverage purposes to the extent allocated to the Water System, pursuant to an opinion provided by the Board's bond counsel.

<sup>[3]</sup> The increase in revenues is derived from a rate increase that went into effect January 1, 2019. The Board recognized the adopted 2019 rate increases to meet debt service coverage requirements in 2018 pursuant to Section 7.01(c) of the General Bond Resolution.

<sup>[4]</sup> Total operating expenses as reported in the CAFR including all cash and non-cash items such as depreciation.

upon available information, the expected revenue, expenses, debt service, and debt service coverage for the Board's Water System during the forecast period.

All schedules in the Feasibility Evaluation have been presented in accordance with the Board's annual accounting cycle, beginning January 1 and ending December 31. Accordingly, the forecast reflects the expected conditions and the Board's expected course of action during each of the six years ending December 31, 2020 through December 31, 2025.

The Feasibility Evaluation has been included as a part of the Official Statement for the Board's Taxable Water Revenue Refunding Bonds, Series 2021 ("Series 2021 Bonds"), which are being issued under the General Water Revenue Bond Resolution ("General Bond Resolution"), adopted by the Board on May 21, 2014 as amended and supplemented to and including the Third Supplemental Water Revenue Bond Resolution adopted by the Board on January \_\_\_\_, 2021 (the "Third Supplemental Resolution" and, together with the General Bond Resolution, the "Bond Resolution"). This Feasibility Evaluation focuses on evaluating the impact of the Series 2021 Bonds, which refund a portion of the outstanding Series 2014 Water Revenue Bonds and Series 2015 Water Revenue Bonds, and include no new project funds.

The Feasibility Evaluation is based upon cost, operating, demographic and other relevant information provided by the Board and the debt service schedules provided to the Board by its Financial Advisor, PFM Financial Advisors LLC. The Feasibility Evaluation is presented in conformity with the methodology for calculating debt service coverage for Indebtedness set forth in the General Bond Resolution. (The definitions of capitalized terms, not specifically provided in this document, are provided in the General Bond Resolution.)

The General Bond Resolution sets forth a three-part debt service coverage test as part of the Rate Covenant in Section 7.01. The Board shall fix, charge, and collect rates, fees, and other charges for the use of and the services furnished by the System and shall, from time to time and as often as shall appear necessary, revise such rates, fees and other charges so as to meet the following three independent requirements: (i) for the Tested Fiscal Year to (A) pay Annual Debt Service on Senior Debt, (B) deposit the necessary amount in any Series Debt Service Reserve Account, (C) to pay Annual Debt Service on Subordinate Debt (including reserves), (D) deposit the necessary amount(s) in the Operating Reserve Fund, and (E) pay all other amounts which the Board may by law or contract be obligated; (ii) for each Fiscal Year to generate Rate Covenant Net Revenues sufficient to at least equal 125% of the Annual Debt Service with respect to Senior Debt and 110% of the aggregate Annual Debt Service with respect to Senior Debt and Subordinate Debt; and (iii) for each Fiscal Year to generate adjusted Rate Covenant Net Revenues (excluding transfers from the Rate Stabilization Fund to the Revenue Fund and proceeds of Grants) sufficient to at least equal 100% of the Annual Debt Service on Senior and Subordinate Debt. In all cases, Annual Debt Service related to the CEA GO Zone Indebtedness and all DPW Payments shall be excluded from the foregoing calculations.

Forecasts of revenues and expenses are prepared on an accrual basis and are then adjusted to be consistent with the Board's budgeting process, and the specific requirements of the coverage tests identified in the General Bond Resolution. Compliance with the Rate Covenant is demonstrated on the Forecast Statement under the headings Senior Debt Service Coverage and Total Debt Service Coverage. Since the ratios calculated using Rate Covenant Net Revenues are greater than

1.25 for Senior Debt and 1.10 for combined Senior Debt and Subordinate Debt in each year of the Forecast Statement, the requirements under the first and second parts of the test related to Indebtedness are met. Once adjusted for transfers from the Rate Stabilization Fund and proceeds of Grants, the total debt service coverage on Adjusted Rate Covenant Net Revenues is well above 1.00, satisfying the third part of the test.

The assumptions disclosed herein are those that the Board believes are significant to the Forecast Statement. There will usually be differences between forecasted and actual results because events and circumstances frequently do not occur as expected, and those differences may be material.

## 2. Background

#### **Overview of Service Area**

According to the U.S. Census Bureau, the estimated 2019 population of New Orleans is 390,144. The population has increased significantly from an estimate of 208,548 in 2006 following Hurricane Katrina. Prior to Hurricane Katrina the population was approximately 455,000. Since 2010, the U.S. Census Bureau reports the City's population has grown 12.2%, which equates to a 1.3% annual growth rate. Most of this growth occurred prior to 2016 and the net population growth since 2016 has essentially been flat. However, projections developed for the Board's ongoing consent decree program indicate that the citywide population could increase due to planned residential projects and major institutional expansions through the City.

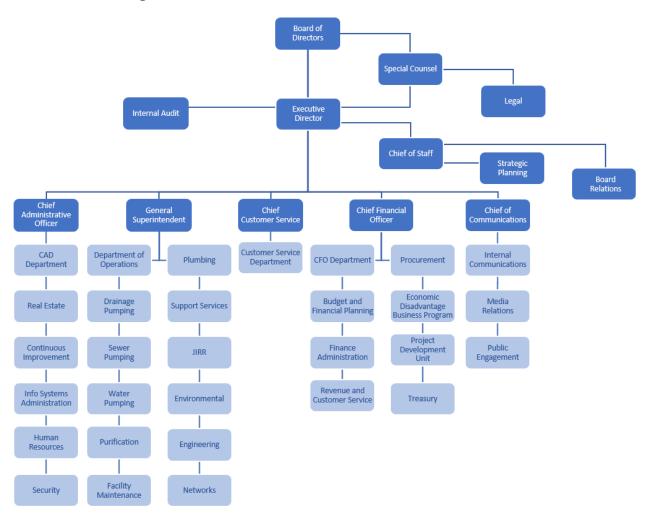
#### Governance

SWBNO was created in 1899 by Louisiana State Statutes and established as a "special board" operating independently of the government of the City of New Orleans. Even though SWBNO is a political subdivision of the State of Louisiana, SWBNO must obtain approval by the Board of Liquidation, City Debt and the New Orleans City Council to issue debt, modify millages, or increase rates and charges.

The Board of Directors includes 11 members – the Mayor of New Orleans, who serves as the President of the Board of Directors; the chair of the Public Works, Sanitation and Environment Committee of the New Orleans City Council or his/her designee, two representatives of the Board of Liquidation, and seven citizen members, of which five represent council districts and two are consumer advocates. Finally, one of the appointments shall be a retired civil engineer.

The Board appoints an Executive Director who leads a team of executives and staff in the daily operations of the water, sewer, and drainage functions. The SWBNO organization chart is on the following page.

**Exhibit 3: SWBNO Organizational Chart** 



Source: Sewerage & Water Board of New Orleans, Adopted 2020 Operating & Capital Budgets for the Fiscal Year Ending December 31, 2020.

#### Water System

The Board operates two water treatment plants on the east and west bank of the Mississippi River. River water is pumped to both the Carrollton Water Purification Plant and the Algiers Water Purification Plant through large pumping stations. Once, the purification process is complete, the filtered water is pumped through more than 1,610 miles of mains and delivered to customers to provide water for drinking and for fire protection. The Carrollton plant normally yields approximately 135 million gallons per day of finished water for the east bank of Orleans Parish. The Algiers Plant, which serves the predominantly residential west bank portion of the parish, purifies about 11 million gallons per day of water. Combined, the two plants treat approximately

54 billion gallons of water per year, removing 18,000 tons of solid material from the raw river water.

#### 3. Demand for Services

The Board provides water service to all residential, commercial, and industrial customers within the City and Orleans Parish. As mentioned above, population growth has slowed since 2016, while there continues to be strong development in certain parts of the service area, overall growth is flat. Like most utilities across the country, the Board is seeing declining per capita consumption.

Exhibit 4 presents the number of water accounts by customer class and metered consumption reported for 2017 through 2019:

**Exhibit 4: Historical Water Customers and Sales** 

	Historical			
	2017	2018	2019	
Residential:				
Accounts	117,459	118,526	119,182	
Annual Metered Consumption (1,000 Gallons)	7,049,683	8,003,299	7,118,095	
Average Metered Consumption per Account (1,000 Gallons per Month)	5.00	5.63	4.98	
Multi-Family:				
Accounts	4,658	4,623	4,589	
Annual Metered Consumption (1,000 Gallons)	724,520	888,418	753,801	
Average Metered Consumption per Account (1,000 Gallons per Month)	12.96	16.01	13.69	
Commercial:				
Accounts	12,821	12,787	12,813	
Annual Metered Consumption (1,000 Gallons)	6,595,721	6,443,709	6,120,766	
Average Metered Consumption per Account (1,000 Gallons per Month)	42.87	41.99	39.81	
Industrial:				
Accounts	34	32	32	
Annual Metered Consumption (1,000 Gallons)	204,912	229,810	230,082	
Average Metered Consumption per Account (1,000 Gallons per Month)	502.24	598.46	599.17	
Total:				
Accounts	134,972	135,968	136,616	
Annual Metered Consumption (1,000 Gallons)	14,574,836	15,565,235	14,222,743	
Average Metered Consumption per Account (1,000 Gallons per Month)	9.00	9.54	8.68	

Accounts have grown from 134,972 in 2017 to 137,745 in 2020, an average growth of 0.7% per year. With uncertainty due to COVID-19 and lingering economic effects, the number of customers during the projection period is forecasted to stay at the existing 2020 number. While new accounts

are expected to be opened, net migration out of the service area is expected to largely mitigate any growth.

Exhibit 5 provides the total number of customers and metered consumption during the forecast period. As shown in the exhibit, the 2020 metered consumption is estimated based on year-to-date sales revenue, which reflects lower consumption per account. To be conservative, no increase in accounts or consumption is assumed during the remaining forecast period.

**Exhibit 5: Water Customers and Consumption Projections** 

	Estimated	Projected				
	2020	2021	2022	2023	2024	2025
Accounts	137,745	137,745	137,745	137,745	137,745	137,745
Annual Metered Consumption (1,000 Gallons)	13,428,220	13,428,220	13,428,220	13,428,220	13,428,220	13,428,220
Average Metered Consumption per Account (1,000 Gallons per Month)	8.12	8.12	8.12	8.12	8.12	8.12

The Board has a diverse customer base, with the Board's ten largest customers accounting for less than six percent (6%) of the annual water revenues in 2019 as shown below:

**Exhibit 6: Largest Water System Customers by Revenue** 

Customer Name	Annual Gallons Used (1,000s)	2019 Water Revenue	% of Water Revenue
Tulane University	184,723	\$1,299,475	1.15%
NASA MAF6216002	170,587	1,017,911	0.90%
Board of Commission	128,827	917,641	0.81%
LSU Health Sciences Center	87,812	604,932	0.53%
Children's Hospital	93,242	593,830	0.52%
Touro Infirmary	82,405	516,976	0.46%
Xavier University	64,733	482,650	0.43%
Loyola University	68,931	475,015	0.42%
United States Postal Service	64,618	401,033	0.35%
VA Dept. of Veterans Affairs	61,123	379,368	0.33%
TOTAL	1,007,000	\$6,688,830	5.90%
2019 Sales of Water		\$113.339.213	

#### 4. Rates and Bill Comparisons

Each of the Board's three systems (water, sewerage, and drainage) operates as a distinct business enterprise. Appropriate fees and charges have been established to ensure that the Water System can operate on a self-sustaining basis.

#### **Current Charges**

The Board employs a water rate structure with two components: a monthly service charge and volumetric charges based on the amount of water consumed each month. The monthly service charge increases based on a customer's meter size. The volumetric rates are billed per thousand gallons of usage and is based on a four-block structure as shown in Exhibit 7.

Exhibit 7 shows the Board's current rates effective January 1, 2020.

**Exhibit 7: Existing Monthly Water Rates and Charges** 

	Effective
Description	January 1, 2020 <sup>1</sup>
Fixed Monthly Charge:	
Meter Size:	
5/8"	\$8.69
3/4"	\$10.64
1"	\$13.50
1.5"	\$22.28
2"	\$29.38
4"	\$115.76
6"	\$227.23
8"	\$336.57
10"	\$456.58
12"	\$535.90
16"	\$713.80
Volumetric Rate	
(per 1,000 Gallons):	
Block 1 (0 – 3,000)	\$5.80
Block 2 (3,001 - 20,000)	\$9.87
Block 3 (20,001 - 1,000,000)	\$7.76
Block 4 (Over 1,000,000)	\$6.50

One of the key objectives of the Board is to maintain rates and charges at a sufficient level to provide revenues to cover existing operating costs, rate funded capital costs, debt service, and any other water related obligations. The Board's current rates described above became effective January 1, 2020 and is the last of the approved eight annual 10% rate increases. The Feasibility Evaluation assumes the

<sup>&</sup>lt;sup>1</sup> Fixed monthly charges shown are for "General Service" which includes all customers except those with dual meter service and fire service. Those customers with dual meter and metered fire service have slightly higher fixed monthly charges than the General Service shown herein. Volumetric rates shown above are the same for dual meter and metered fire service.

existing rates effective January 1, 2020 will remain in effect through the end of calendar year 2021, and then incremental 2% per year rate increases will be implemented. These rate increases are assumed herein for financial feasibility purposes and have not been reviewed or approved by the Board as of the date of this report.

Rates and charges are developed to generate sufficient revenue to address Water System revenue requirements, while maintaining rates that are reasonably affordable and are competitive to other utilities. Exhibit 8 shows a comparison of the Board's current water bills with other utilities.

Exhibit 8: Comparison of Residential Bills with Other Utilities (5,000 Gallons)

	Monthly Bill
Description	(5,000 Gallons/Month) <sup>[2]</sup>
Dallas	\$16.95
Mobile	\$21.22
Baton Rouge	\$21.53
Nashville	\$25.21
Jackson	\$28.95
Houston	\$31.46
Atlanta	\$34.63
St. Louis	\$35.70
New Orleans 2020	\$45.83
Birmingham	\$47.02

As shown above, the existing water bill for a residential customer using 5,000 gallons of water per month is \$45.83. On an annual basis, these amounts equal \$549.96 in 2020. According to the U.S. Census Bureau, the 2018 median household income ("MHI") for Orleans Parish is \$39,576. Escalating this amount by 1.0% annually results in an estimated MHI of \$40,371 in 2020. The ratio of annual water costs for a typical residential customer to MHI is approximately 1.36% in 2020. The percentage falls below the 2.5% affordability metric used by the water industry. [3]

<sup>[2]</sup> The cost comparison is based upon a projected monthly bill for a residential customer with a 5/8" meter (some utilities listed may use a 3/4" meter for residential customers) and 5,000 gallons of water usage. Amounts are based on rates effective as of January 1, 2021.

<sup>[3]</sup> Developing a New Framework for Household Affordability and Financial Capability Assessment in the Water Sector (Raucher, Rothstein, Mastracchio, and Green; April 17, 2019) p. 1-7 to 1-8.

#### 5. Revenues

In order to meet the financial obligations of the Series 2021 Bonds, other debt service obligations and other water expenses, water revenue requirements must be recovered from revenues associated with the Water System. Revenues, as defined in the General Bond Resolution, include operating revenues (charges for services and other operating revenues) and certain non-operating revenues.

Exhibit 9 shows the projection of water sales revenue, including delinquent fees, during the forecast period. The 2020 water sales revenue shown herein is based on year to date results reported through the end of October 2020 and an estimate of the remaining two months of 2020 based on revenue trends.

Operating revenues during the past several years have increased due to the implementation of the adopted rate increases. [4] The actual revenue increases from year to year have varied based on reasons such as consumption patterns and other factors such as the implementation of a new Cogsdale billing system in late 2016. The new billing system is a robust billing system but much more complicated than the legacy billing system. The billing system conversion led to widespread billing discrepancies during 2017 and 2018, including the underbilling of certain accounts. SWBNO also temporarily suspended penalties and non-payment service shutoffs which also negatively affected revenues during 2017 and 2018. By early 2019, the underbilling had been substantially corrected and reported water revenues have stabilized. This increase in water revenue also led to an increase in uncollectible accounts as addressed in Explanatory Note 6. For example, the water system provision for doubtful accounts expense was historically below \$2 million per year prior to 2017. This expense increased dramatically starting in 2017 to \$8.8 million and again in 2019 to \$15.2 million due to a significant increase in accounts receivables and bad debt write-offs due to the billing challenges. While it is expected that this expense will likely decrease in the future, we have assumed this level of provision for doubtful accounts to continue at the \$15.2 million level during the forecast period as a contingency on the revenue forecast.

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[4] The Board implemented a series of eight (8) rate increases of 10% each year between January 2013 with the most recent and final rate increase implemented in January 2020.

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The following exhibit summarizes the historic and projected water service charges:

**Exhibit 9: Historical and Projected Water Sales and Delinguent Fees** 

Actual	Amount	% Increase
2015	\$78,007,937	
2016	\$83,158,940	6.6%
2017	\$90,464,810	8.8%
2018	\$90,287,081	-0.2%
2019	\$113,339,213	25.5%
	Average	
	Annual Increase	10.7%

Projected [1]	Amount	% Increase
2020	\$114,871,322	1.4%
2021	\$115,626,250	0.7%
2022	\$117,842,420	1.9%
2023	\$120,199,268	2.0%
2024	\$122,603,254	2.0%
2025	\$125,055,319	2.0%

<sup>[1]</sup> The amount shown for 2020 is based on unaudited reported sales through October 2020.

As shown above, the projected 2020 water sales and delinquent fee revenue is expected to be only about 1.4% higher than the reported 2019 amount, primarily due to lower commercial demand resulting from COVID-19 economic impacts but also lower customer water consumption in response to the rate increases implemented over the past several years. Another contributing factor to 2020 water sales is the suspension of delinquent fees in March 2020. The suspension of delinquent fees is assumed to continue through June 2021 and then resume in July 2021. As a consequence there is a slight uptick in revenue in 2021 due to the resumption of fees for delinquent accounts. No other growth or rate increases are assumed in 2021. A 2% per year rate adjustment is assumed beginning in 2022 and continuing through the end of the forecast period. These rate adjustments have not been approved by the Board but are reasonable for planning purposes to keep pace with inflation and to complete the capital funding plan. An evaluation of customer affordability is included later in this Feasibility Evaluation.

In addition to water service charges, the Board collects revenue for plumbing inspections and other miscellaneous services on an ongoing basis. The following summarizes the total water revenue projection including the water service charges and miscellaneous fees:

**Exhibit 10: Projected Annual Water Revenues** 

Projected Year Ending December 31, 2020 2021 2022 2023 2024 2025 Operating Revenues: Water Sales and Delinquent Fees \$114,871,322 \$115,626,250 \$117,842,420 \$120,199,268 \$122,603,254 \$125,055,319 Plumbing Inspection and License Fees 224,483 307,078 307,078 307,078 307,078 307,078 4,047,840 1,725,600 1,725,600 1,725,600 1,725,600 1,725,600 Other Revenues [1] **Total Operating Revenues** \$119,143,645 \$122,231,946 \$127,087,997 \$117,658,928 \$119,875,098 \$124,635,932 Non-Operating Revenues: \$1,076,700 Interest Income \$987,419 \$1,225,300 \$1,246,000 \$1,237,900 \$1,199,000 Contribution from Other Governments [2] 1,187,800 1,187,800 1,187,759 1,187,759 1,187,800 1,187,800 290,838 260,626 260,600 260,600 260,600 260,600 Other Non-Operating Revenue \$2,466,016 \$2,694,400 \$2,686,300 \$2,647,400 **Total Non-Operating Revenues** \$2,525,085 \$2,673,700 \$121,609,661 \$120,184,013 \$122,548,798 \$124,926,346 \$127,322,232 \$129,735,397 **Total Revenues** 

<sup>[1]</sup> The majority of Other Revenues in 2020 represents payments by vendors for damages during work performed for the Board.

<sup>[2]</sup> Contributions from Other Governments" consist of "Fair Share" revenue from the City of New Orleans for infrastructure funding. Amounts based on year to date receipts through October 2020, and allocated 18% to the Water System based on the 2019 allocation of such revenue.

#### 6. Operating Expenses

Exhibit 11 shows a forecast of operating expenses for the Board's Water System. Operating expenses represent normal recurring expenses incurred during the Board's annual accounting cycle based upon its year ending December 31. The 2020 operating expenses are based on historical expense trends and year to date results as described below.

Water operating expenses have increased 6.6% per year between 2015 and 2019 before any adjustment for extraordinary expenses. Excluding extraordinary expenses, the annual increase during this period was 15.9% or 3.8% per year. Based on actual year to date results through October 2020, water operating expenses excluding depreciation and provision for doubtful accounts are 9.8% lower compared to the same ten-month period ended October 2019. However, the provision of doubtful accounts is expected to remain relatively high at approximately \$15.2 million in 2020 which would result in estimated 2020 water operating expenses being \$84.5 million or 2.4% higher than \$82.5 million in 2019. The 2021 water operating expenses are based on the Board's adopted 2021 Budget. Between 2022 and 2025 a 4.0% escalation rate is assumed for all line items except Provision for Doubtful Accounts which is assumed to remain at \$15.2 million per year. A summary of projected operating expenses is shown below:

**Exhibit 11: Projected Operating Expenses** 

	Estimated	Projected Year Ending December 31,					
	2020	2021	2022	2023	2024	2025	
Operating and Maintenance							
Power and Pumping	\$2,145,466	\$2,906,600	\$3,023,000	\$3,143,000	\$3,269,000	\$3,400,000	
Treatment	8,315,392	10,978,495	11,417,000	11,872,000	12,347,000	12,839,000	
Transmission and Distribution	13,501,005	19,707,564	20,497,000	21,317,000	22,171,000	23,056,000	
Customer Accounts	2,060,712	3,665,941	3,813,000	3,966,000	4,125,000	4,289,000	
Customer Service	3,308,497	4,122,332	4,287,000	4,458,000	4,636,000	4,821,000	
Admin., General & Payroll [1]	26,835,474	20,464,562	21,282,000	22,134,000	23,019,000	23,935,000	
Maintenance of General Plant	12,388,999	14,098,999	14,663,000	15,249,000	15,860,000	16,494,000	
Provision for Doubtful Accounts	15,171,065	15,171,065	15,171,065	15,171,065	15,171,065	15,171,065	
Provision for Claims	747,996	1,309,600	1,363,000	1,417,000	1,474,000	1,533,000	
Total O&M Expenses	\$84,474,605	\$92,425,158	\$95,516,065	\$98,727,065	\$102,072,065	\$105,538,065	
Percent Increase	N/A	9.4%	3.3%	3.4%	3.4%	3.4%	

<sup>[1]</sup> Payroll-related amounts shown above exclude non-cash pension and OPEB expenses.

## 7. Capital Expenditures and Funding Sources

The Board's Capital Improvement Plan ("CIP") consists of a variety of water projects identified over the next 10 years. While the CIP includes a 10-year projection, the Board establishes annual capital budgets by prioritizing all capital projects and determining which projects can and should be funded in each year. As shown below, a large portion of the water capital improvement funding is planned for extensions and replacements of existing water lines:

Exhibit 12: Water Capital Funding Summary 2020 – 2025

Description	Project Costs
Extensions/Replacements	\$170,538,442
Facilities	111,613,550
Power	10,791,815
Equipment	46,806,660
Software	6,164,696
Hardware	1,763,331
Other	16,631,641
Total	\$364,310,136

Description	Funding Sources
Future LDH SRF [1]	\$50,000,000
FEMA	220,000,000
Pay-Go	94,310,136
Total	\$364,310,136

<sup>[1]</sup> LDH = Louisiana Department of Health. See Exhibit 15 for more information.

As shown above, the total during the forecast period is \$364 million, which is approximately \$61 million per year. As a means of comparison, the Board has completed between \$20 million and \$90 million per year of water capital projects since 2010. Funding sources include future low-interest SRF loans, FEMA reimbursed projects, and the remaining funded from pay-go revenue sources (i.e., either water rate revenue or "fair share" revenue).

## 8. Financing Plan

The Series 2021 Bonds are expected to be issued on or about February 23, 2021 and will refund approximately \$161 million of the existing Water System debt for debt service savings, with no new project funds anticipated to be issued. The exhibit below provides the projected sources and uses of funds for the Series 2021 Bonds.

Exhibit 13: Sources and Uses of Series 2021 Bonds

Amount
\$194,300,000.00
\$1,001,250.00
2,015,662.50
\$3,016,912.50
\$197,316,912.50
\$1.63
23,063,504.00
171,417,349.50
\$194,480,855.13
\$748,856.03
288,376.26
282,067.45
1,516,757.63
\$2,836,057.37
\$197,316,912.50

Note: Sources and Uses provided by the Board's Managing Underwriter.

The Series 2021 Bonds include the issuance of a surety for the purpose of releasing approximately \$7.9 million of existing debt service reserves. In addition, the Series 2021 Bonds are structured to provide the majority of debt service savings upfront in 2021. An additional bonds test is not required since the Series 2021 Bonds do not include new money for project funding and the refunding will result in lower debt service each year as shown below:

**Exhibit 14: Water System Senior Debt Service Savings** 

Year	Prior Senior Debt Service	Prior Receipts	After Debt Service Refunding	Savings
2021	\$13,471,250	\$3,016,913	\$4,856,418	\$5,597,919
2021	13,470,350	φ3,010,913	12,736,714	733,636
2023	13,470,000		12,740,989	729,011
2024	13,470,750		12,740,045	730,705
2025	13,470,500		12,738,660	731,840
2026	13,468,750		12,740,117	728,633
2027	13,470,000		12,735,511	734,489
2028	13,473,500		12,743,034	730,466
2029	13,468,500		12,737,186	731,314
2030	13,469,750		12,741,326	728,424
2031	13,471,250		12,740,301	730,949
2032	13,472,250		12,742,793	729,457
2033	13,472,000		12,743,185	728,815
2034	13,469,750		12,740,923	728,827
2035	13,469,750		12,740,423	729,327
2036	13,471,000		12,740,642	730,358
2037	13,472,500		12,736,140	736,360
2038	13,473,250		12,737,729	735,521
2039	13,472,250		12,731,085	741,165
2040	13,468,500		12,726,207	742,293
2041	13,471,000		12,732,806	738,194
2042	13,468,250		12,730,305	737,945
2043	13,469,250		12,732,398	736,852
2044	13,472,500		12,734,329	738,171
2045	13,471,500		13,120,799	350,701
	\$336,768,350	\$3,016,913	\$310,940,065	\$22,811,372

Exhibit 15 provides the total existing and proposed debt service during the forecast period by debt issue including both senior and projected subordinate debt service:

**Exhibit 15: Existing and Proposed Long-Term Debt Service** 

		Projected Year Ending December 31,						
	2020	2021	2022	2023	2024	2025		
Senior Debt Service:								
Series 2014	\$7,690,000	\$642,250	\$3,867,250	\$2,711,000	\$2,714,500	\$2,712,250		
Series 2015	5,783,550	761,350	1,731,350	2,887,250	2,884,500	2,886,500		
Proposed Series 2021	0	3,452,818	7,138,114	7,142,739	7,141,045	7,139,910		
Total Senior Debt Service	\$13,473,550	\$4,856,418	\$12,736,714	\$12,740,989	\$12,740,045	\$12,738,660		
Other Debt Service:								
Proposed Future LDH SRF Loans [1]	\$0	\$0	\$556,700	\$1,113,400	\$1,670,100	\$2,226,800		
Total Other Debt Service	\$0	\$0	\$556,700	\$1,113,400	\$1,670,100	\$2,226,800		
Total Debt Service	\$13,473,550	\$4,856,418	\$13,293,414	\$13,854,389	\$14,410,145	\$14,965,460		

<sup>[1]</sup> Debt service assumes \$10 million per year new SRF loans, starting in 2021 with repayment beginning the year after issuance (e.g., the first SRF loan in 2021 begin debt service in 2022). Debt amortization is assumed over a 20 year period, 1.0% interest rate with one year capitalized interest.

#### 9. Fund Balances

The General Bond Resolution requires an Operating Reserve of 90 days of annual operating expenses (90 days cash on hand). This ratio measures the Board's liquidity, presenting unrestricted cash in "number of days" of operating expenses. As of December 31, 2019, the Board's Comprehensive Annual Financial Report ("CAFR") indicated available Water System unrestricted cash and cash equivalents of \$33,211,223. This reserve level is approximately 147 days of operating and maintenance expenses as indicated in the CAFR.

As can be seen in Exhibit 16, the Board exceeds the minimum required each year of the forecast period.

**Exhibit 16: Projected Fund Balances** 

	Projected Year Ending December 31,						
	2020 (Est.)	2021	2022	2023	2024	2025	
Beginning Unrestricted Balance [1]	\$33,211,223	\$22,562,593	\$41,339,580	\$43,078,898	\$43,423,790	\$42,263,812	
Sources:							
Operating Revenues	\$119,143,645	\$117,658,928	\$119,875,098	\$122,231,946	\$124,635,932	\$127,087,997	
Non-Operating Revenues	2,466,016	2,525,085	2,673,700	2,694,400	2,686,300	2,647,400	
Debt Service Release	0	7,874,550	0	0	0	0	
Total Sources	\$121,609,661	\$128,058,563	\$122,548,798	\$124,926,346	\$127,322,232	\$129,735,397	
Uses:							
Operating Expenses	\$84,474,605	\$92,425,158	\$95,516,065	\$98,727,065	\$102,072,065	\$105,538,065	
Debt Service	13,473,550	4,856,418	13,293,414	13,854,389	14,410,145	14,965,460	
Revenue Funded Capital	34,310,136	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	
Total Uses	\$132,258,291	\$109,281,576	\$120,809,479	\$124,581,454	\$128,482,210	\$132,503,525	
Remaining Unrestricted Funds for Transfer	(\$10,648,630)	\$18,776,987	\$1,739,318	\$344,892	(\$1,159,978)	(\$2,768,128)	
Total Available Funds – End of Year Balances:							
Remaining Unrestricted Funds	\$22,562,593	\$41,339,580	\$43,078,898	\$43,423,790	\$42,263,812	\$39,495,684	
Days of Cash on Hand [2]	97	163	165	161	151	137	

<sup>[1]</sup> The beginning balance represents unrestricted cash and cash equivalents, cash and cash equivalents designated for capital projects, other designated cash, and deposits.

#### 10. Affordability

Affordability is a growing concern among public water and sewer utilities. This issue is particularly sensitive for the Board following the implementation of eight 10% annual rate increases. As part of the Feasibility Evaluation, we calculated the customer impacts relative to median household income, which is typically used as a high-level test of affordability.

Exhibit 17 shows that under the implemented 10.0% rate increase in 2020 and the estimated 2.0% per year rate adjustments in 2022 through 2025, the water rates will remain below 2.5% of projected median household income for Orleans Parish. This analysis indicates that the cost of water service in New Orleans will remain within affordability parameters.

**Exhibit 17: Forecast Affordability Ratios** 

	Projected Year Ending December 31,					
	2020	2021	2022	2023	2024	2025
Median Household Income [1]	\$40,371	\$40,775	\$41,183	\$41,595	\$42,011	\$42,431
Average Monthly Residential Water Bill (5,000 Gallons)	\$45.83	\$45.83	\$46.75	\$47.68	\$48.64	\$49.61
Percent of MHI	1.36%	1.35%	1.36%	1.38%	1.39%	1.40%

<sup>[1]</sup> The projected MHI is assumed to increase by 1.0% per year.

Even though this analysis indicates the Board's rates are affordable in general, the Board recognizes that a portion of its customer base may be impacted more significantly by the increases in water rates and charges. As such, the Board is evaluating mechanisms that could help ensure water service remains affordable to its low-income customers.

# APPENDIX F

GENERAL BOND RESOLUTION



# GENERAL WATER REVENUE BOND RESOLUTION

adopted on May 21, 2014

by the

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

# IN CONNECTION WITH THE ISSUANCE OF

WATER REVENUE BONDS

OF THE

CITY OF NEW ORLEANS, LOUISIANA

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## SEWERAGE AND WATER BOARD OF NEW ORLEANS

#### GENERAL WATER REVENUE BOND RESOLUTION

The following resolution was offered by Charles F. Webb and seconded by Florence Schornstein:

## GENERAL WATER BOND RESOLUTION

A resolution authorizing the issuance from time to time of Water Revenue Bonds of the City of New Orleans, Louisiana, providing for the general terms, form, manner of payment and security for payment of said bonds, providing for the issuance of a series of Water Revenue and Refunding Bonds, and providing for other matters in connection therewith.

**WHEREAS**, pursuant to Part III, Chapter 9, Title 33 of the Louisiana Revised Statutes of 1950, as amended, in particular Section 4096 thereof (the "Act"), the Sewerage and Water Board of New Orleans (the "Board") in the name of the City of New Orleans, Louisiana (the "City") is authorized to issue bonds; and

WHEREAS, the City on behalf of the Board has previously issued and has outstanding the following bonds through its General Water Revenue Bond resolution dated October 25, 1986 (as amended or supplemented from time to time, the "1986 Water Bond Resolution") and has determined not to issue any further series of bonds, including refunding bonds, pursuant to the 1986 Water Bond Resolution:

\$5,570,000,000 of outstanding Water Revenue Bonds, Series 1998 (the "Series 1998 Bonds"), dated December 1, 1998, with a final maturity of December 1, 2018; and

\$22,085,000 of outstanding Water Revenue Bonds, Series 2002 (the "Series 2002 Bonds"), dated October 1, 2002, with a final maturity of December 1, 2022

(the aforesaid Series 1998 Bonds and Series 2002 Bonds are herein called the "Prior Bonds"); and

WHEREAS, the City desires to provide for the terms and conditions of, and security for, Bonds and other Indebtedness to be issued or incurred by the Board through this General Water Revenue Bond Resolution (the "General Water Revenue Bond Resolution") pursuant to supplemental resolutions related hereto adopted from time to time for a particular series (each a "Supplemental Resolution" and collectively the "Supplemental Resolutions," together with the General Water Revenue Bond Resolution, as any may be amended or supplemented from time to time, herein referred to as the "Resolution"); and

WHEREAS, the Board has found and determined that the refunding of all or a portion of the Prior Bonds would be financially advantageous to the City and would allow for the Water GBR Final

modification of certain covenants related to the Prior Bonds, and pursuant to the provisions of Resolution Number R-033-2014, adopted on February 19, 2014, the Board authorized the issuance of not exceeding One Hundred Fifteen Million Dollars (\$115,000,000) of Water Revenue and Refunding Bonds, Series 2014 of the City of New Orleans, Louisiana for the purpose of refunding all or a portion of the Prior Bonds and paying the costs of improving and expanding water treatment plants, and improvements, extensions, betterments and repairs to the public water system of the City of New Orleans, Louisiana (the "Project"), funding a debt service reserve fund and other reserve funds as required hereunder, and paying costs of issuance; and

WHEREAS, it is now the desire of the Board to adopt this General Water Revenue Bond Resolution in order to provide for the issuance of the bonds to refund the Prior Bonds and pay Costs, and further to provide for the issuance from time to time of Additional Bonds and other Indebtedness as further provided herein;

NOW, THEREFORE, BE IT RESOLVED by the Sewerage and Water Board of New Orleans, as follows:

### **ARTICLE I**

## **DEFINITIONS AND INTERPRETATION**

- SECTION 1.01. <u>Short Title</u>. This resolution may be hereafter cited, and is sometimes herein referred to, as the "General Water Revenue Bond Resolution".
- SECTION 1.02. <u>Definitions</u>. In this General Water Revenue Bond Resolution unless a different meaning clearly appears from the context:
- "Account" shall mean any of the various Accounts, sometimes created within a Fund, under this General Water Revenue Bond Resolution, a Supplemental Resolution or by the Board or Board of Liquidation at their discretion as provided herein.
- "Accreted Values" with respect to any Capital Appreciation Bonds, Capital Appreciation and Income Bonds, and Current Interest Capital Appreciation Bonds shall mean an amount equal to the Principal Amount of such Bonds (determined on the basis of the Principal Amount per \$5,000 at maturity thereof) plus the amount assuming semiannual compounding of earnings which would be produced on the investment of such Principal Amount, beginning on the dated date of such Bonds and ending at the maturity date thereof, at a yield which if produced until maturity will produce \$5,000 at maturity. As of any Valuation Date, the Accreted Value of any such Bonds shall mean the amount set forth for such date in the Supplemental Resolution and as of any date other than a Valuation Date, the sum of (a) the Accreted Value on the preceding Valuation Date and (b) the product of (i) a fraction, the numerator of which is the number of days having elapsed from the preceding Valuation Date and denominator of which is the number of days from such preceding Valuation Date to the next succeeding Valuation Date, and (ii) the difference between the Accreted Values for such Valuation Dates. For purposes of consents, voting rights, Bondowner rights, or any other matter herein determined by a percentage of the aggregate Principal Amount of Bonds Outstanding, Capital Appreciation Bonds, Capital Appreciation and Income Bonds, and Current Interest Capital Appreciation Bonds shall be valued at their Accreted Values.
- "Act" shall mean the Sewerage and Water Board Act, being Part III of Chapter 9 of Title 33 of the Revised Statutes of Louisiana, as amended.
- "Additional Bonds" shall mean Bonds of the City issued pursuant to Section 4.03 hereof except for the initial Series of Bonds issued hereunder.
- "Additional Indebtedness Test" means the certification requirement set forth in Section 4.03(h)(ii) or 4.03(i)(ii) for the issuance of Additional Bonds, in Section 4.04(a)(ii) for the Issuance of Other Senior Parity Indebtedness, or in Section 4.05 for Subordinate Debt.
- "Additional Indebtedness Test Net Revenues" shall mean Net Revenues adjusted for the purpose of determining fulfillment of the Additional Indebtedness Test to exclude for the relevant Test Period any Revenues consisting of Direct Payments, Grants, proceeds of any business interruption insurance, and investment income earned on the Construction Fund and Rate Stabilization Fund.

"Alternate Variable Rate Tax-Exempt Index" shall mean such index as, at the time, is in general use by tax-exempt issuers as a proxy for short-term interest rates on debt obligations of state and local governments the interest on which is excluded from gross income for federal income tax purposes, as determined by an Authorized Officer.

"Alternate Variable Rate Taxable Index" shall mean such index as, at the time, is in general use by taxable issuers as a proxy for short-term interest rates on debt obligations of state and local governments the interest on which is not excluded from gross income for federal income tax purposes, as determined by an Authorized Officer.

"Annual Budget" shall have the meaning given such term in Section 7.02 hereof.

"Annual Debt Service" shall mean the amount of payments scheduled to come due within a specified Fiscal Year for principal of and interest on any specified Indebtedness, including mandatory sinking fund redemptions and payments pursuant to agreements with providers of Credit Facilities with respect to such Indebtedness to reimburse such providers for debt service payments made with respect to such Indebtedness, but net of any accrued interest and capitalized interest funded from proceeds of Bonds. For purposes of calculating Annual Debt Service, the following assumptions are to be used to calculate the principal and interest due in such specified Fiscal Year:

- (a) In determining the Principal Amount due in the Fiscal Year, payment shall be assumed to be made in accordance with any amortization schedule established for such Indebtedness (unless a different subsection of this definition applies for purposes of determining principal maturities or amortization), including any scheduled redemption of such specified Indebtedness and, for such purpose, the redemption payment shall be deemed a principal payment;
- (b) If any of the specified Indebtedness constitutes Tender Indebtedness, then Annual Debt Service on the options or obligations of the holders of such Indebtedness to tender the same for purchase or payment prior to their stated maturity or maturities shall be treated as a principal maturity occurring on the first date on which owners of such Indebtedness may or are required to tender such Indebtedness, except that any such option or obligation to tender Indebtedness shall be ignored and not treated as a principal maturity if (1) such Indebtedness is rated at least in the "A" rating category (without regard to any rating refinement or gradation by numerical modifier or otherwise) by a Rating Agency, or such Indebtedness is rated in one of the two highest short-term note or commercial paper rating categories by a Rating Agency, and (2) any obligation the Board may have, other than its obligation on such Indebtedness, to reimburse any provider of a Credit Facility shall either be subordinate to the obligation of the Board on such Indebtedness, or shall have been incurred under and shall have met the tests and conditions for the issuance of such specified indebtedness set forth herein;
- (c) If any of the specified Indebtedness constitutes Variable Rate Indebtedness, the interest rate on such Indebtedness shall be assumed to be 100% of (1) with respect to any Variable Rate Indebtedness Outstanding as of the date of calculation, the daily average interest rate on such Indebtedness during any consecutive 12-month period during the immediately preceding 24 months ending with the month preceding the date of calculation, or such shorter

period that such Indebtedness shall have been Outstanding, or (2) with respect to any Variable Rate Indebtedness which is being issued on the date of computation, the Certified Interest Rate;

(d) For purposes of determining the annual amount payable in respect of any Indebtedness designated by the Board as a Refundable Principal Installment (including Bond Anticipation Notes), such Indebtedness that is or would be a Refundable Principal Installment shall be treated on the date of calculation as if (i) from the date of issuance thereof the principal amount of such Indebtedness had been payable as a part of equal annual installments of principal and interest over a period extending from the due date thereof through the 30<sup>th</sup> anniversary of the issue date of such Indebtedness and (ii) interest accrues at a rate equal to the actual fixed rate of interest on such Indebtedness or if such Indebtedness is Variable Rate Indebtedness, interest payable during such Fiscal Year shall be calculated in accordance with subsection (c) above.

"Authorized Officer" shall mean any officer, employee, agent or other person authorized by resolution of the Board or the Board of Liquidation, respectively, to act on behalf of said entity for any purpose of the Resolution.

"Board" shall mean the Sewerage and Water Board of New Orleans, a body politic and corporate and political subdivision of the State created and established pursuant to the Act.

"Board of Liquidation" shall mean the Board of Liquidation, City Debt, of the City of. New Orleans.

"Bond Anticipation Notes" shall mean any notes issued in anticipation of the issuance of Bonds.

"Bond Counsel" shall mean Foley & Judell, L.LP., or any attorney or firm of attorneys nationally recognized on the subject of municipal bonds and employed by the Board of Liquidation.

"Bondholders" or "holder" or "Bondowner" or "owner" shall mean the owner of Bonds, Other Senior Parity Indebtedness or the Subordinate Debt, as the case may be.

"Bonds" shall mean any of the Water Revenue Bonds of the Board authenticated and delivered under the Resolution, but not including Subordinate Debt.

"Business Day" shall mean a day on which banking business is transacted, but not including a Saturday, Sunday or legal holiday, or any day on which banks located in the City of New Orleans, or any day on which the New York Stock Exchange is closed, or in the city in which the Paying Agent administers the payment of the Bonds, are authorized by law to close.

"Capital Appreciation Bonds" shall mean Bonds as to which the Accreted Value is payable only at the maturity or prior redemption of the Bonds. For purposes of consents, voting rights, Bondowner rights, or any other matter herein determined by a percentage of the aggregate Principal Amount of Bonds Outstanding, Capital Appreciation Bonds shall be valued at their Accreted Values.

"Capital Appreciation and Income Bonds" shall mean Bonds as to which interest is deferred and compounded prior to the date after which interest ceases to be deferred and compounded and the interest becomes currently payable. For purposes of consents, voting rights, Bondowner rights, or any other matter in herein determined by a percentage of the aggregate Principal Amount of Bonds Outstanding, Capital Appreciation and Income Bonds shall be valued at their Accreted Values.

"Capital Improvement" shall mean any extension, improvement, enlargement, betterment, alteration, renewal or replacement of the System (including land, equipment and other real or personal properties), which (i) is used or useful in connection with the System or any part thereof, (ii) is constructed, acquired, or made by or on behalf of the Board, and (iii) are properly chargeable (whether or not so charged by the Board), according to generally accepted accounting principles, as an addition to utility plant accounts.

"CEA GO Zone Indebtedness" shall mean the amounts payable under the Cooperative Endeavor Agreement dated July 19, 2006, between the State of Louisiana and the Sewerage and Water Board.

"Certified Interest Rate" shall mean (i) with respect to Variable Rate Indebtedness that was or will be, at the date of the original issuance thereof, the subject of an opinion of Bond Counsel to the effect that the interest thereon is excluded from gross income for federal income tax purposes pursuant to Section 103 of the Code, a rate of interest equal to the average of the SIFMA Municipal Swap Index or, if such rate is no longer available, the Alternate Variable Rate Tax-Exempt Index for the five (5) years preceding such date of determination; and (ii) with respect to Indebtedness that was not and will not be, at the date of the original issuance thereof, the subject of an opinion of Bond Counsel to the effect that the interest thereon is excluded from gross income for federal income tax purposes pursuant to Section 103 of the Code, a rate of interest equal to the average of the One-Month LIBOR Rate or, if such rate is no longer available, the Alternate Variable Rate Taxable Index for the five (5) years preceding such date of determination.

"City" shall mean the City of New Orleans, Louisiana.

"Code" shall mean the Internal Revenue Code of 1986, as amended, including applicable regulations, rulings and revenue procedures promulgated or applicable thereunder.

"Common Debt Service Reserve Requirement" shall mean, for all Common Debt Service Reserve Secured Bonds, the least of (i) 10% of the aggregate original stated Principal Amount of all Common Debt Service Reserve Secured Bonds (provided that if any Common Debt Service Reserve Secured Bonds have more than a de minimis (2%) amount of original issue discount or premium, the issue price of such Common Debt Service Reserve Secured Bonds (net of pre-issuance accrued interest) is used to measure the 10% limitation in lieu of its stated Principal Amount), (ii) the maximum amount of aggregate Annual Debt Service on all Common Debt Service Reserve Secured Bonds in any Fiscal Year, or (iii) 125% of average aggregate Annual Debt Service on all Common Debt Service Reserve Secured Bonds.

"Common Debt Service Reserve Secured Bonds" shall mean any Series of Bonds for which the Supplemental Resolution authorizes said Bonds to be secured by the Common Debt Service Reserve Requirement.

"Connection Fees" shall mean all nonrecurring fees that the Board collects from developers, builders or others (1) to compensate the Board for providing System capacity, or (2) to connect facilities related to installation of and expansion of the System.

"Construction Fund" shall mean the fund so designated and created by Section 6.01 hereof.

"Cost," as applied to any Capital Improvement, shall mean all or any part of the cost, paid by or on behalf of or reimbursable by or to the Board, of (a) construction, acquisition, alteration, reconstruction and remodeling of such Capital Improvement, (b) all lands, real and personal property, rights of way, water rights, air rights, franchises, easements and interests necessary or convenient therefor, (c) any demolitions or relocations necessary in connection therewith, financing charges, interest prior to, during and for such period as the Board shall determine after the period of construction of such Capital Improvement on Indebtedness issued in whole or in part to finance such construction, architectural, engineering, financial and legal services, plans, specifications, appraisals, surveys, inspections, estimates of costs and revenues, and other expenses necessary or incident to determining the feasibility or practicality of such work, (e) organizational, administrative, operating and other expenses prior to the commencement of and during such work, (f) advance training of operating personnel and other expense, including initial working capital, of completing such work and placing the same in operation, and (g) any other item of Cost attributable to the construction, acquisition, alteration, reconstruction and remodeling of such Capital Improvement and placing the same in operation.

"Cost of Issuance" shall mean all items of expense directly or indirectly payable or reimbursable by or to the Board or the Board of Liquidation and related to the authorization, sale and issuance of Indebtedness, including but not limited to printing costs, costs of preparation and reproduction of documents, filing and recording fees, initial fees and charges of any Fiduciaries, legal fees and charges, fees and disbursements of consultants and professionals, costs and expenses of refunding, costs and expenses of any Credit Facility with respect to such Indebtedness, fees and expenses payable in connection with any remarketing agreements or interest rate indexing agreements and any other cost, charge or fee in connection with the original issuance of Indebtedness.

"Counsel's Opinion" shall mean an opinion signed by an attorney or firm of attorneys selected by the Board, the Board of Liquidation or the Trustee, respectively.

"Credit Facility" shall mean a letter of credit, liquidity facility, a bond insurance policy, surety bond or similar arrangement securing any obligation of the Board with respect to any Indebtedness.

"Current Interest Capital Appreciation Bonds" shall mean Bonds as to which a portion of interest is currently payable and a portion of the interest is deferred and compounded until the Accreted Value is payable only at the maturity or prior redemption of the Bonds. For purposes

of consents, voting rights, Bondowner rights, or any other matter herein determined by a percentage of the aggregate Principal Amount of Bonds Outstanding, Current Interest Capital Appreciation Bonds shall be valued at their Accreted Values.

"Debt Service Fund" shall mean the fund so designated and created by Section 7.03(c) hereof.

"Debt Service Reserve Fund" shall mean the fund so designated and created by Section 7.03(d) hereof.

"Direct Payment" shall mean a credit payment allowed pursuant to Section 54AA(g) of the Code that is payable to the Board of Liquidation by the U.S. Treasury, as provided in Section 6431 of the Code, or any other payment by the U.S. Treasury, the State or any other public or private entity to the Board of Liquidation to subsidize or reimburse the Board of Liquidation for all or a portion of the interest cost that the Board of Liquidation may pay on Indebtedness that qualifies for such payment under any successor or substantially similar program.

"DPW Payments" shall mean certain past due payments owed by the Board to the Department of Public Works ("DPW") of the City of New Orleans under certain contractual arrangements and payments incurred in the future which are agreed to by the Board and the City to be payable over time and not as a current Operating Expense with respect to certain reimbursement of expenses incurred by the DPW on behalf of the Board in connection with certain water improvements.

"Escrow Trustee" shall have the meaning given in Section 13.01 hereof.

"Event of Default" shall mean any of the events enumerated in Section 10.01.

"Fiduciary" shall mean the Paying Agent or any Trustee.

"Fiscal Year" shall mean the period beginning on January 1 of any calendar year and ending on December 31 of such calendar year or such other period of twelve calendar months as may be provided by the Act or authorized by the Board pursuant to the Act.

"Fitch" shall mean Fitch Ratings, Inc. or its successors.

"Fund" shall mean any of the funds created under Sections 6.01 and 7.03 hereof.

"GAAP" shall mean generally accepted accounting principles, consistently applied.

"Government Obligations" shall mean noncallable direct general obligations of the United States of America or obligations unconditionally guaranteed in principal and interest by the United States of America, including certificates or other evidence of an ownership interest in such noncallable direct obligations, which may consist of specified portions of interest thereon, such as those securities commonly known as CATS, TIGRS, and STRPS.

"Grant" shall mean a grant provided by any entity to or for the Board for the payment of Operating Expenses.

"Indebtedness" shall mean Senior Debt and Subordinate Debt.

"Interest," with respect to any Bond, shall mean the stated interest payment thereon or such other amount payable on any designated as interest pursuant to a Supplemental Resolution.

"Interest Account" shall mean the Interest Account in the Debt Service Fund so designated and created by Section 7.03(c) hereof.

"Moody's" shall mean Moody's Investors Service or its successors.

"Net Proceeds" shall mean the gross proceeds from any insurance recovery or recovery in any condemnation proceeding remaining after payment of attorneys' fees, fees and all other expenses incurred in collection of such gross proceeds.

"Net Revenues" shall mean Revenues in any Fiscal Year less Operating Expenses for that period.

"One-Month LIBOR Rate" shall mean, on any date of determination, the offered rate (rounded up to the next highest one one-thousandth of one percent (0.001%)) for deposits in U.S. dollars for a one-month period which appears on L.P.'s Bloomberg Professional System at approximately 11:00 A.M., London time, on such date, or if such date is not a date on which dealings in U.S. dollars are transacted in the London interbank market, then on the next preceding day on which such dealings were transacted in such market.

"Operating Expenses" shall mean all current expenses directly or indirectly attributable to the ownership or operation of the System, including reasonable and necessary usual expenses of administration, operation, maintenance and repair; costs for billing and collecting the rates; insurance premiums; costs and expenses of any Credit Facility; legal, engineering, auditing and financial advisory expenses; expenses and compensation of the Fiduciaries; and deposits into a self-insurance program as described in this Resolution; all as determined (except as other specified in this Resolution) in accordance with GAAP for entities such as the Board consistently applied. Operating Expenses may include payments by the Board for water or other commodities under Take-or-Pay Contracts, without regard to the Board's receipt of the commodity for which a payment is made, but only if the requirements in Section 4.06 for such inclusion are met. Operating Expenses shall not include any payments in lieu of taxes or allowance for depreciation or amortization. Operating Expenses shall also exclude expenses which constitute extraordinary, nonrecurring and non-continuing expenses of the System in the written opinion of the Qualified Independent Consultant.

"Operating Fund" shall mean the Operating Fund designated and created by Section 7.03(b) hereof.

"Operating Reserve Fund" shall mean the Operating Reserve Fund designated and created by Section 7.03(e) hereof.

"Operating Reserve Requirement" shall mean an amount equal to 90 days of Operating Expenses based on the Operating Expenses relating to the most recent Fiscal Year prior to such calculation for which the audit required in Section 9.10 hereof has been completed.

"Other Senior Parity Indebtedness" shall mean any other Indebtedness incurred by the Board under this Resolution that the Board is required, or has elected, to treat as payable on a parity with the Bonds with respect to the pledge of Net Revenues.

"Outstanding", when used with reference to Indebtedness, shall mean as of a particular date, all Bonds theretofore and thereupon being authenticated and delivered except (i) any Bond cancelled by the Board or a Fiduciary at or before said date, (ii) any Bond in lieu of or in substitution for which another Bond shall have been authenticated and delivered pursuant to the Resolution and (iii) Bonds deemed to have been paid as provided in the Resolution.

"Owner" shall mean the registered owner of a Bond of a particular Series of Bonds as shown on the register for such Series of Bonds.

"Paying Agent" or "Paying Agent/Registrar" shall mean the paying agent appointed in accordance with Section 12.02 hereof, and its successors which may at any time be substituted in its place pursuant to the Resolution.

"Permitted Investments" shall mean the following, to the extent permitted under State law at the time of investment:

- (i) direct obligations of the United States of America (including obligations issued or held, in book-entry only form on the books of the Department of the Treasury of the United States of America and including certificates or other instruments evidencing ownership interests in such direct obligations of the United States of America) or obligations the timely payment of the principal of and interest on which are fully guaranteed by the United States of America, including obligations of any agency, department or instrumentality that is fully guaranteed as to the payment of principal and interest by the United States;
- (ii) obligations issued or guaranteed by Federal Home Loan Bank System, Export-Import Bank of the United States, Federal Financing Banks, Government National Mortgage Association, Federal National Mortgage Association, Farmer's Home Administration, Federal Home Loan Mortgage Corporation or Federal Housing Administration; or by any agency, department or instrumentality of the United States if such obligations are rated in one of the two highest rating categories by Fitch, S&P and Moody's
- (iii) interest-bearing bankers acceptances or certificates of deposit of, or time deposits in any bank (including any Fiduciary), lead bank of a parent holding company, or any savings and loan associations whose unsecured obligations are rated in one of the two highest rating categories by all of the Rating Agencies, provided such deposits are either (a) secured at all times, in the manner and to the extent provided by law, by collateral security (described in clause (i) or (ii) of this definition) of a market value of no less than the amount of moneys so invested or (b) fully insured by the Federal Deposit Insurance Corporation;

- repurchase agreements which satisfy the following criteria: (a) repurchase agreement which provides for the transfer of securities from dealer banks or securities firms to the Fiduciary or its agents, and the transfer of cash from the Fiduciary to the dealer bank or securities firm with an agreement that the dealer bank or securities firm will repay the cash, plus a yield to the Fiduciary, in exchange for the securities at a specified date; (b) repurchase agreement must be between the Fiduciary and a dealer bank or securities firm which are either a primary dealer on the Federal Reserve reporting dealer list or a bank rated "A" or above by all of the Rating Agencies; (c) the written repurchase agreement must include the following terms: (1) securities which are acceptable for transfer are (A) direct United States government obligations, or (B) obligations of federal agencies backed by the full faith and credit of the United States government; (2) with respect to control of the collateral, if the dealer bank or securities firm supplied the collateral pursuant to the repurchase agreement, it may not retain possession of such collateral and the collateral must be delivered to the Fiduciary (unless the Fiduciary is supplying the collateral) or a third party acting as agent for the Fiduciary before or simultaneous with payment; and (3) the securities must be valued weekly, marked-to-market at current market price plus accrued interest, the value of collateral must be equal to 102% of the amount of cash transferred by the Fiduciary to the dealer bank or securities firm under the repurchase agreement, plus accrued interest, and if the value of securities held as collateral is less than 104% of the value of the cash transferred by Fiduciary, then additional cash and/or acceptable securities must be transferred; and (d) to the extent required by a credit enhancer, an opinion of Bond Counsel, to the effect that such repurchase agreements are obligations in which public funds are permitted to be invested under State law, shall be delivered to the Fiduciary;
- (v) commercial paper of "prime" quality of the highest ranking or the highest rating category as provided by all of the Rating Agencies;
- (vi) obligations, the interest on which is exempt from federal income taxation, and which, if rated by the Rating Agencies, are rated in one of the two highest rating categories of such Rating Agencies;
- (vii) a time deposit account drawn on the Fiduciary for amounts whose aggregation is less than \$5,000;
- (viii) mutual funds, including any such fund of a Fiduciary or any affiliate of the Fiduciary, which invest exclusively in any investment described in clauses (i) through (vii) otherwise left uninvested in the funds;
- (ix) corporate bonds, defined as all corporate and financial institution debt securities with a maximum remaining maturity of three years or less, issued by corporations or financial institutions organized and operating in the United States. Eligible corporate bonds shall be rated in one of the two highest categories by at least two of the Rating Agencies;
- (x) Investment agreements or guaranteed investment contracts with entities whose long-term ratings at the time of investment are in one of the two highest rating categories by at least two of the Rating Agencies.

- (xi) Collateralized investment agreements and flexible repurchase agreements with entities whose long-term ratings at the time of investment are in one of the three highest rating categories by at least one of the Rating Agencies, provided that collateral consisting of those described in clauses (i) and (ii) be posted to a third-party custodial account at a margin of 104% for collateral described in clause (i) and 105% for collateral described in clause (ii); and
- (xii) Forward delivery agreements with entities whose long-term ratings at the time of investment are in one of the three highest rating categories by one of the Rating Agencies, provided that eligible deliverables under the contract be limited to those described in clauses (i) and (ii).
- "Principal Account" shall mean the Principal Account in the Debt Service Fund established and created by Section 7.03(c) hereof.
- "Principal Amount," with respect to any Indebtedness, shall mean the stated principal thereon, the Accreted Value thereof, as applicable, or such other amount payable on any Indebtedness that is designated as principal pursuant to a Supplemental Resolution.
- "Prior Bonds" shall mean all Water Revenue Bonds of the Board issued and outstanding as of the date of this Resolution, as more specifically described in the preamble hereto.
- "Project" shall mean a Capital Improvement to the System, all or a portion of the Cost of which is financed by or reimbursed from proceeds of Indebtedness.
- "Qualified Independent Consultant" shall mean an independent professional consultant nationally recognized as having the skill and experience necessary to provide the particular certificate, report or approval required by this Resolution or any Supplemental Resolution in which such requirement appears.
- "Rate Covenant" shall mean the obligation of the Board to fix, charge, collect and revise rates, fees and other charges for the use of, and the services furnished by, the System sufficient to meet the requirements of this Resolution, including, without limitation, Section 7.01.
- "Rate Covenant Net Revenues" shall mean Net Revenues, provided that Net Revenues shall be adjusted for the purpose of determining compliance with the Rate Covenant as follows: (i) to include transfers from the Rate Stabilization Fund to the Revenue Fund (as provided in Section 7.05 hereof), and (ii) to exclude transfers to the Rate Stabilization Fund from the Revenue Fund (as provided in Section 7.04 hereof).
- "Rate Stabilization Fund" shall mean the fund so designated and created by Section 7.03(h) hereof.
- "Rating Agency" or "Rating Agencies" shall mean Fitch, Moody's or Standard & Poor's, or any of them, and their successors. The Board may seek a rating from any other nationally recognized securities rating agency, but such rating agency shall not be a "Rating Agency" hereunder.

"Record Date" shall mean the fifteenth day of the month preceding each interest payment date, or as otherwise provided in a Supplemental Resolution.

"Redemption Fund" shall mean the fund so designated and created by Section 7.03(k) hereof.

"Refundable Principal Installment" shall mean the Bond Anticipation Notes or any other Indebtedness, the principal of which the Board intends to pay with monies which are not Revenues, provided that such intent shall have been expressed in the Resolution or other document authorizing such Indebtedness and provided further that such Indebtedness shall be a Refundable Principal Installment only through the date which is thirty (30) days prior to the date on which such Indebtedness comes due or such earlier time as the Board has determined to pay such Indebtedness with moneys which are not Revenues.

"Reserve Determination Date" shall mean (a) annually, the first Business Day of each Fiscal Year and (b) any other date established in writing by an Authorized Officer of the Board for the valuation of obligations on deposit in any Series Debt Service Reserve Account.

"Resolution" shall mean this General Water Revenue Bond Resolution as the same may be amended or supplemented in accordance herewith.

"Revenue Fund" shall mean the Revenue Fund designated and created by Section 7.03(a) hereof.

"Revenues" shall mean all moneys received as income, rates, fees, charges, receipts, profits and other moneys derived by the Board from its ownership and operation of the System, and for the use of and for the services furnished by the System, or by the Board of Liquidation on behalf of the Board in connection with the System, including Connection Fees, Direct Payments, Grants, proceeds of any business interruption insurance, and investment earnings on all of the funds held by the Board of Liquidation under this Resolution and the Board, all as determined (except as otherwise provided in this definition) in accordance with GAAP for entities such as the Board, consistently applied, except any rebate fund that may be created under the Resolution. Revenues shall not include refundable customer deposits or other payments solely in aid of construction; the proceeds resulting from the sale of all or a portion of the System other than such minor parts or portions thereof as may be disposed of due to normal wear and tear and obsolescence; revenues derived from a Separate System; and sanitation or other charges that the Board collects not for the services of the System but solely as a fiscal agent or in another such agency capacity, other than the net revenues of such sanitation or other charges retained by the Board to the extent allocated to the System.

"Senior Debt" shall mean shall mean Bonds and Other Senior Parity Indebtedness.

"Separate Series Debt Service Reserve Requirement" shall mean, for any Series of Additional Bonds for which the Supplemental Resolution authorizes a Separate Series Debt Service Reserve Requirement, the amount, if any, specified in such Supplemental Resolution as the Separate Series Debt Service Reserve Requirement; provided, however, that such amount shall not exceed the maximum amount permitted by the Code.

- "Separate Series Debt Service Reserve Secured Bonds" shall mean any series of Bonds for which the Supplemental Resolution authorizes said Bonds to be secured by the Separate Series Debt Service Reserve Requirement.
- "Separate System" shall mean a separate water system that the Board does not own or operate as of the date of this Resolution, but of which the Board subsequently becomes the operator under a contract that (i) does not obligate the Board to pay the expense of operating, maintaining or improving that system from any revenues other than those the Board derives from that system, and (ii) does not obligate the Board to assume responsibility for the payment of any debt obligation other than from revenues derived from that System.
- "Series" when used with respect to less than all of the Bonds, shall mean such Bonds designated as a Series of Bonds pursuant to a Supplemental Resolution.
- "Series Construction Account" shall mean each account established in the Construction Fund pursuant to a Supplemental Resolution for a Series of Bonds the proceeds of which are to be used to pay Costs.
- "Series Debt Service Reserve Account" shall mean each account in the Debt Service Reserve Fund related to a particular Series of Bonds that is required to be funded as required in a Supplemental Resolution.
- "Series Debt Service Reserve Requirement" for any Series of Bonds shall be the Common Debt Service Reserve Requirement or the Separate Series Debt Service Reserve Requirement set forth in the Supplemental Resolution authorizing such Series of Bonds.
- "SIFMA Municipal Swap Index" means the SIFMA Municipal Swap Index of Municipal Market Data, formerly the BMA Municipal Swap Index (as such term is defined in the 1992 ISDA U.S. Municipal Counterparty Definitions).
- "Signing Parties" shall mean those parties designated to execute the Bonds by a Supplemental Resolution.
- "Sinking Fund Account" shall mean the Sinking Fund Account in the Debt Service Fund created in Section 7.03(c) hereof.
- "Standard & Poor's" shall mean Standard & Poor's Ratings Services, a Standard & Poor's Financial Services LLC business, or its successors.
  - "State" shall mean the State of Louisiana.
- "Subordinate Debt" shall mean any bonds, notes or other obligations issued in connection with the System (a) which are designated by the Board as Subordinate Debt, and (b) which have pledged to their payment Net Revenues, alone or in conjunction with other sources, as a subordinate lien pledge after the pledge of Net Revenues to Senior Debt.
- "Subordinate Debt Debt Service Fund" shall mean the Subordinate Debt Debt Service Fund designated and created by Section 7.03(f) hereof.

"Subordinate Debt Debt Service Reserve Fund" shall mean the Subordinate Debt Debt Service Reserve Fund designated and created by Section 7.03(g) hereof.

"Supplemental Resolution" shall mean with respect to any Series of Bonds, the Supplemental Resolution authorizing such Series of Bonds, and any other resolution of the Board amending or supplementing the Resolution adopted and becoming effective in accordance with the terms of Article IX.

"System" shall mean all plants, systems, facilities, equipment, real and personal property and tangible and intangible property, together with all future extensions, improvements, enlargements and additions thereto, and all replacements thereof, used, or to be used, in connection with the waterworks system of the Board, other than a Separate System.

"Take-or-Pay Contract" shall mean a contract which obligates the Board to pay to another entity a certain amount for goods or services, whether or not such goods or services are taken or used by the Board, and which contract payments are designated by the Board, at the time of execution, as Indebtedness or Operating Expenses as provided in Section 4.07 hereof.

"Tender Indebtedness" shall mean any Indebtedness a feature of which is an option or obligation on the part of the holders of such Indebtedness to tender all or a portion of such Indebtedness to a fiduciary for purchase or redemption prior to the stated maturity date of such indebtedness, which may include Variable Rate Indebtedness with such a feature.

"Term Bonds" shall mean any Bonds stated to mature on a specified date and required to be redeemed in part prior to maturity according to a sinking fund schedule.

"Test Period", for purposes of the Additional Indebtedness Test, shall mean any 12 consecutive months of the last 24 months prior to the issuance of such Indebtedness.

"Trustee" means the trustee appointed in accordance with Section 12.01, if any, and its successor or successors and any other corporation which may at any time be substituted in its place pursuant to the Resolution.

"Valuation Date" with respect to any Capital Appreciation Bonds, Capital Appreciation and Income Bonds, or Current Interest Capital Appreciation Bonds, shall mean the date or dates set forth in the Supplemental Resolution on which specific Accreted Values are assigned to such Capital Appreciation Bonds, Capital Appreciation and Income Bonds, or Current Interest Capital Appreciation Bonds.

"Variable Rate Indebtedness" shall mean any Indebtedness the interest rate on which is not established at the time of incurrence at a fixed or constant rate, provided that (a) the maximum interest rate on such Indebtedness and the maximum rate payable to any Credit Facility provider with respect to such indebtedness shall be specified at the time of issuance of such indebtedness; (b) any Credit Facility provider shall cause such Indebtedness to be rated by a Rating Agency in one of the two highest short-term rating categories of such Rating Agency; (c) any accelerated principal payments or any interest in excess of the bond interest rate payable to such Credit Facility provider shall be subordinate to the payment of debt service on Bonds, and (d) any two or more series of Bonds that are issued on the same date, the interest on which when Water GBR Final

such series are considered in the aggregate shall be a fixed or constant rate, shall not be considered Variable Rate Indebtedness.

"Water System Fund" shall mean the Water System Fund designated and created by Section 7.03(i) hereof.

SECTION 1.03. <u>Rules of Interpretation</u>. Unless the context clearly indicates to the contrary, the following rules shall apply to the interpretation and construction of this Resolution:

- (1) words importing the singular number shall include the plural number and *vice versa*;
- (2) all references to particular articles or sections herein are references to articles or sections of this Resolution;
- (3) the captions and headings herein are solely for convenience of reference and shall not constitute a part of this Resolution, nor shall they affect its meaning, construction or effect;
- (4) the terms "herein," "hereunder," "hereby," "hereof," and any similar terms, refer to the Resolution as a whole; the term "heretofore" shall mean before the effective date of the Resolution; and the term "hereafter" shall mean after the effective date of the Resolution; and
- (5) any reference to "Louisiana Revised Statutes" or "La. R.S." shall refer to the referenced section of the Louisiana Revised Statutes of 1950, as amended.

### **ARTICLE II**

## **AUTHORIZATION AND ISSUANCE OF BONDS**

SECTION 2.01. <u>Authority for the Resolution</u>. The Resolution is adopted pursuant to the Act.

SECTION 2.02. Resolution to Constitute a Contract. In consideration of the purchase and acceptance of the Indebtedness by those who shall own the same from time to time, the Resolution shall constitute a contract among the Board, the Board of Liquidation, the City and the registered owners from time to time of the Indebtedness, and the pledge made in the Resolution and the covenants and agreements therein set forth to be performed by or on behalf of the Board shall be for the equal benefit, protection and security of the registered owners of any and all of the Indebtedness, all of which, regardless of the time or times of their issue or maturity, shall be of equal rank without preference, priority or distinction of any of the Indebtedness over any other thereof, except as expressly provided herein with respect to Subordinated Debt and as otherwise expressly provided in or permitted by the Resolution.

SECTION 2.03. <u>Authorization of Bonds</u>. There is hereby established and created an issue of Bonds of the City issued through the Board to be designated as "Water Revenue Bonds," which Bonds may be issued in multiple series as hereinafter provided from time to time, without limitation as to amount except as provided in the Resolution or as limited by law. The Bonds may, if and when authorized by the Board pursuant to one or more Supplemental Resolutions, be issued in one or more Series, and the designation thereof, in addition to the name "Water Revenue Bonds", may include such further appropriate designations added to or incorporated in such title for the Bonds of any particular Series as the Board may determine. Each Series of Bonds shall have such interest rates, redemption provisions, Principal Amounts, and maturity dates as shall be set forth in or pursuant to a Supplemental Resolution.

# **ARTICLE III**

# EXECUTION, AUTHENTICATION, DELIVERY, REGISTRATION AND FORM OF BONDS

SECTION 3.01. Form and Details of Bonds. Unless otherwise provided in the applicable Supplemental Resolution, the Bonds shall be issuable only as registered Bonds without coupons, in denominations of \$5,000 and multiples thereof. The form, details, delivery and terms of each Series of Bonds and such other matters as the Board may deem appropriate shall be set forth in the applicable Supplemental Resolution for such Series of Bonds. Principal, premium, if any, and interest shall be payable in lawful money of the United States of America.

SECTION 3.02. Execution of Bonds. Unless otherwise provided in the applicable Supplemental Resolution, the Bonds shall be signed by the manual or facsimile signatures of the Signing Parties, and the corporate seal of the City shall be affixed thereto or a facsimile thereof printed or otherwise reproduced thereon. In case any officer whose signature or a facsimile of whose signature shall appear on any Bond shall cease to be such officer before the delivery of such Bond, such signature or such facsimile shall nevertheless be valid and sufficient for all purposes the same as if he had remained in office until such delivery. Any Bond may bear the facsimile signature of or may be signed by such persons as at the actual time of the execution thereof shall be the proper officers to sign such Bond although at the date of such Bond such persons may not have been such officers. Any Bond of a Series may be signed and sealed on behalf of the Board, the Board of Liquidation and the City by such persons as at the actual time of the execution of such Bond shall be duly authorized or hold the proper office respectively, although at the date of the Bonds of such Series such persons may not have been so authorized or have held such office.

SECTION 3.03. <u>Authentication of Bonds</u>. Unless otherwise provided in the applicable Supplemental Resolution, the Bonds shall bear a certificate of authentication and shall not be valid until the Paying Agent shall have executed the certificate of authentication and inserted the date of authentication thereon. The Paying Agent shall authenticate each Bond with the signature of an authorized officer or employee, but it shall not be necessary for the same person to authenticate all of the Bonds or all of the Bonds of any Series. Only such authenticated Bonds shall be entitled to any right or benefit under this Resolution, and such certificate on any Bond issued hereunder shall be conclusive evidence that the Bond has been duly issued and is secured by the provisions hereof.

# SECTION 3.04. Registration and Transfer of Bonds; Persons treated as Owners.

- (a) All Bonds issued under this Resolution shall be negotiable, subject to the provisions for registration and registration of transfer thereof contained herein or in a Supplemental Resolution.
- (b) The Board of Liquidation shall cause the Paying Agent to maintain registration books with respect to each Series of Bonds at the offices of the Paying Agent and shall provide for the registration and registration of transfer of any Bond of such Series under such reasonable

regulations as the Paying Agent may prescribe. The Paying Agent shall maintain books for purposes of exchanging and registering Bonds in accordance with the provisions hereof.

- (c) Each Bond of a Series shall be registered or registered for transfer only upon the registration books maintained by the Paying Agent, by the Bondholder thereof in person or by his attorney duly authorized in writing, upon presentation and surrender thereof together with a written instrument of transfer satisfactory to the Paying Agent duly executed by the registered Bondholder or his duly authorized attorney. Upon surrender for registration of transfer of any such Bond, the Board of Liquidation shall cause to be executed and the Paying Agent shall authenticate and deliver, in the name of the transferee, one or more new Bonds of the same Series, interest rate, maturity, Principal Amount and date as the surrendered Bond, as fully registered Bonds only.
- (d) The Paying Agent shall treat the registered owner as the person exclusively entitled to payment of principal, premium, if any, and interest and the exercise of all other rights and powers of the owner on the registration books, except that interest payments shall be made to the person shown as owner on the Record Date.

SECTION 3.05. Exchange of Bonds; Charges for Exchange of Bonds. Bonds, upon presentation and surrender thereof to the Paying Agent, together with written instructions satisfactory to the Paying Agent, duly executed by the registered Bondholder or his attorney duly authorized in writing, may be exchanged for an equal aggregate Principal Amount of fully registered Bonds of the same Series and tenor.

Any exchange of Bonds shall be at the expense of the Board of Liquidation, except that the Paying Agent may charge the person requesting such exchange the amount of any tax or other governmental charge required to be paid with respect thereto.

SECTION 3.06. <u>Temporary Bonds</u>. Prior to the preparation of Bonds in definitive form, the Board may issue temporary Bonds in such denominations as the Board may determine, but otherwise in substantially the form set forth in the applicable Supplemental Resolution, with appropriate variations, omissions and insertions. The Board of Liquidation shall promptly prepare, execute and deliver to the Paying Agent before the first interest payment date Bonds in definitive form and thereupon, upon surrender of Bonds in temporary form, the Paying Agent shall authenticate and deliver in exchange therefor Bonds in definitive form of the same maturity having an equal aggregate Principal Amount. Until exchanged for Bonds in definitive form, Bonds in temporary form shall be entitled to the lien and benefit of this Resolution.

SECTION 3.07. <u>Mutilated, Lost, Stolen or Destroyed Bonds</u>. In the event any outstanding Bond, whether temporary or definitive, is mutilated, lost, stolen or destroyed, the Board of Liquidation may execute and, upon its written request, the Paying Agent may authenticate a new Bond of the same Principal Amount and of like tenor as the mutilated, lost or stolen or destroyed Bond; provided that, in the case of any mutilated Bond, such mutilated Bond shall first be surrendered to the Paying Agent, and in the case of any lost, stolen or destroyed Bond, there shall be first furnished to the Board of Liquidation and the Paying Agent evidence of such loss, theft or destruction in form satisfactory to the Board of Liquidation and the Paying Agent, together with indemnity satisfactory to them. In the event any such Bond shall have

matured, instead of issuing a substitute Bond the Board of Liquidation may authorize the payment of the same. The Board of Liquidation and the Paying Agent may charge the owner of such Bond with their reasonable fees and expenses in this connection. Any Bond issued under the provisions of this Section in lieu of any Bond alleged to be destroyed, lost or stolen shall constitute an original additional contractual obligation on the part of the Board of Liquidation, whether or not the Bond so alleged to be destroyed, lost or stolen be at any time enforceable by anyone, and shall be equally and proportionately entitled to the benefits of this Resolution together with all other Bonds in substitution for which such Bonds were issued

SECTION 3.08. <u>Cancellation and Disposition of Bonds</u>. All Bonds that have been surrendered for transfer or exchange pursuant to Sections 3.04 and 3.05, paid (whether at maturity, by sinking fund redemption, acceleration, call for redemption or otherwise), or delivered by the Board of Liquidation to the Paying Agent for cancellation shall not be reissued, and the Paying Agent shall, unless otherwise directed by the Board of Liquidation, shred or otherwise dispose of such Bonds. The Paying Agent shall deliver to the Board of Liquidation a certificate of any such shredding or other disposition.

# SECTION 3.09. Non-Presentment of Bonds.

- (a) If any Bond is not presented for payment when the principal thereof becomes due (whether at maturity, by sinking fund redemption, upon acceleration or call for redemption or otherwise), all liability of the Board of Liquidation to the holder thereof for the payment of such Bond shall be completely discharged if moneys sufficient to pay such Bond and the interest due thereon shall be held by the Paying Agent for the benefit of such holder, and thereupon it shall be the duty of the Paying Agent to hold such moneys, subject to subsection (b) below, without liability for interest thereon, for the benefit of such holder, who shall thereafter be restricted exclusively to such moneys for any claim of whatever nature on his part under this Resolution or on, or with respect to, such Bond.
- (b) Notwithstanding anything in this Resolution to the contrary, any cash or Government Obligations deposited with the Paying Agent for the payment of the principal of, premium, if any, and interest on any Series of Bonds remaining unclaimed for more than three years after the principal of such Series of Bonds has become due and payable shall be paid to the Board and shall be held by the Board in trust for the benefit of bondholders in a separate account for seven years and thereafter in the general fund of the Board of Liquidation. After such moneys have been paid to the Board, the holders of such Bonds shall be entitled to look only to the Board of Liquidation, and all liability of the Paying Agent with respect to such amounts shall cease.

#### ARTICLE IV

#### **ISSUANCE OF BONDS**

SECTION 4.01. <u>Purposes of Bonds</u>. Bonds may be issued (a) to pay Costs, (b) to refund Bonds or any other Indebtedness, (c) to pay Costs of Issuance, (d) to fund reserves and/or pay costs associated with capitalized interest, or (e) for a combination of such purposes.

SECTION 4.02. Parity of Senior Debt. This Resolution constitutes a continuing, irrevocable pledge of Net Revenues to secure payment of the principal of, premium, if any, and interest on all Senior Debt and, on a subordinate basis to Senior Debt, on all Subordinate Debt that may from time to time be issued and Outstanding. Each Series of Senior Debt shall be issued pursuant to a Supplemental Resolution or evidenced by other documents and shall be equally and ratably secured by the pledge of Net Revenues under this Resolution, without preference; priority or distinction; provided, however, that the Common Debt Service Reserve Secured Bonds or Separate Series Debt Service Reserve Secured Bonds shall only be secured by the account in the Debt Service Reserve Fund for Common Debt Service Reserve Secured Bonds or each Separate Series Account in the Debt Service Reserve Fund for Separate Series Debt Service Reserve Secured Bonds, as provided in a Supplemental Resolution, and provided further that any Senior Debt may have additional revenues or other security pledged to its payment. In connection with the issuance of Senior Debt, there may be created additional accounts and subaccounts within any fund or account established by this Resolution. Credit Facilities may be provided as additional security for any Series as provided in a Supplemental Resolution. Nothing herein shall be construed, however, as requiring that any Senior Debt bear interest at the same rate or in the same manner as any other Senior Debt, have the same, or an earlier or later, maturity, or be subject to mandatory, optional or extraordinary redemption prior to maturity on the same basis as any other Senior Debt, and provided further that nothing contained in this Resolution shall prevent the Board from issuing (i) bonds, notes or other obligations or evidences of indebtedness under another and separate resolution or ordinance to finance a Separate System; or (ii) other bonds, notes or other obligations or evidences of indebtedness under another and separate resolution or ordinance payable from, among other sources, those moneys withdrawn by the Board from the Water System Fund for any lawful purpose permitted for the expenditure of such monies in the Separate System Fund by the Board. The Bonds do not constitute a debt of the City of New Orleans, and neither the credit nor taxing power of the City of New Orleans is pledged to the payment thereof, or any part thereof, or to the payment of any interest thereon.

SECTION 4.03. <u>Conditions for Issuing Bonds</u>. Before the issuance and authentication of any Series of Bonds by the Paying Agent, there shall be filed with the Board of Liquidation (which shall be confirmed in writing):

- (a) In the case of the initial Series of Bonds:
  - (i) A certified copy of this Resolution;
- (ii) A Counsel's Opinion, subject to customary exceptions and qualifications, substantially to the effect that this Resolution: has been duly authorized, executed and

delivered to the Paying Agent and is a valid, binding and enforceable obligation of the Board.

- A certified copy of a Supplemental Resolution which (1) shall include: (A) (b) provisions authorizing the issuance, fixing the Principal Amount and setting forth the details of such Bonds, including their date, the interest rate or rates and the manner in which the Bonds are to bear and pay interest (including whether such Bonds constitute Capital Appreciation Bonds, Capital Appreciation and Income Bonds or Current Interest Capital Appreciation Bonds), the principal and interest payment dates of the Bonds; the purposes for which such Bonds are being issued, the manner of numbering of such Bonds, the Series designation, the denominations, the maturity dates and principal maturities, the Principal Amounts required to be redeemed pursuant to any mandatory redemption provisions or the manner for determining such Principal Amounts, any provisions for optional or extraordinary redemption before maturity, and any provisions regarding the Common Debt Service Reserve Requirement or Separate Series Debt Service Reserve Requirement; and (B) provisions for the application of the proceeds of such Bonds; and (2) may include: (A) provisions for Credit Facilities and for other Funds and Accounts to be established with respect to such Bonds; (B) provisions necessary or expedient for the issuance and administration of Bonds bearing interest at a variable rate or other manner of bearing interest, including remarketing provisions, liquidity facility provisions and provisions for establishing the variable rate and converting to a fixed rate; (C) provisions for entering into credit enhancement devices permitted by State law; (D) provisions respecting the designation of Refundable Principal Installments, and (E) such other provisions as the Board may deem appropriate.
- (c) A certified copy of applicable resolution(s) of the Board and the Board of Liquidation authorizing, as required by law, the issuance, sale, award, execution and delivery of such Bonds and, in the case of a Series of Bonds issued to refund Indebtedness, calling for redemption or payment of the Indebtedness to be refunded, fixing any redemption date and authorizing any required notice of redemption in accordance with the provisions of this Resolution.
- (d) A certificate signed by an Authorized Officer of the Board and dated the date of such issuance, to the effect that:
  - (i) Either (A) upon and immediately following such issuance, no Event of Default has occurred which has not been cured or waived, and no event or condition exists which, with the giving of notice or lapse of time or both, would become an Event of Default or (B) if any such event or condition is happening or existing, specifying such event or condition, stating that the Board will act with due diligence to correct such event or condition after the issuance of such Bonds, and describing in reasonable detail the actions to be taken by the Board toward such correction; and
  - (ii) All required approvals, limitations, conditions and provisions precedent to the issuance of such Series of Bonds have been obtained, observed, met and satisfied.
- (e) All policies or certificates of insurance (and any amendments to such policies) or evidence of appropriate substitute arrangements required by this Resolution in connection with

the issuance of such Bonds and a certificate of the Authorized Officer of the Board that all policies (and amendments) or appropriate substitute arrangements required to be in effect at that time are in full force and effect and are in such forms as necessary to comply with and satisfy all requirements of this Resolution.

- (f) A Counsel's Opinion, subject to customary exceptions and qualifications, substantially to the effect that the Supplemental Resolution for such Series of Bonds has been duly authorized, executed and delivered, is binding on the Board and complies in all respects with the requirements of this Resolution.
- (g) An opinion of Bond Counsel, subject to customary exceptions and qualifications, substantially to the effect that the issuance of such Bonds has been duly authorized, that such Bonds are valid and binding limited obligations of the City, and with respect to Bonds to be issued on a tax-exempt basis that the interest on such Bonds is excludable from gross income for purposes of Federal income taxation.
- (h) Except in the case of the initial Series of Bonds issued under this Resolution, if a Series of Bonds are issued to pay Costs, the following:
  - (i) (A) if the Bonds are Common Debt Service Reserve Secured Bonds, evidence that upon issuance of such Bonds, the Common Debt Service Reserve Requirement will be fully funded, or (B) if the Bonds are Separate Series Debt Service Reserve Secured Bonds, evidence that, upon issuance of such Bonds, the Separate Series Debt Service Reserve Requirement for such Bonds will be fully funded or will be funded in accordance with the requirements of the applicable Supplemental Resolution; and
  - A certificate of (A) a Qualified Independent Consultant, stating that based (ii) on the Board's financial records for a Test Period, the Board would have been able to meet the Rate Covenant in Section 7.01, taking into account (i) the maximum Annual Debt Service on the proposed Series of Additional Bonds in the current or any future Fiscal Year, (ii) the Additional Net Revenues from the rates, fees and other charges adjusted to reflect any rate increases that had not been in effect throughout the Test Period but that have been approved by the Board, the Board of Liquidation, and the City at the time of the delivery of the proposed Series of Additional Bonds to go into effect within the following five years; and (iii) additional Net Revenues that the Board may realize from the addition to the System of the assets it proposes to finance through the issuance of the proposed Series of Additional Bonds or other funding sources within the following five years or (B) the Authorized Officer of the Board stating that based on the Board's financial records for a Test Period, the Board has met the Rate Covenant in Section 7.01, taking into account the maximum annual Debt Service on the proposed Series of Additional Bonds. In making the certifications required under this paragraph, the Authorized Officer of the Board or the Qualified Independent Consultant, as applicable, shall determine and utilize the Additional Indebtedness Test Net Revenues in place of the Rate Covenant Net Revenues in determining whether the Board would have been able to meet the Rate Covenant in Section 7.01.

- (i) Except in the case of the initial Series of Bonds issued under this Resolution, if any Bonds are issued to refund any Indebtedness, the following:
  - (i) Evidence that the Board has made provision as required by this Resolution for the payment or redemption of all Indebtedness to be refunded;
  - (ii) A certificate of an Authorized Officer of the Board demonstrating that the proposed refunding will not result in an increase in the Annual Debt Service payable on all Indebtedness in any Fiscal Year. If the proposed refunding will result in an increase in the Annual Debt Service payable on all Indebtedness in any Fiscal Year, then the issuance of that Series of Additional Bonds shall be subject to the same requirements as the issuance of a Series of Additional Bonds to pay Costs under Section 4.03(h)(ii).
- (j) A request and authorization of the Board of Liquidation, signed by an Authorized Officer of the Board of Liquidation, to the Paying Agent to authenticate and deliver such Bonds to the purchaser upon payment to the Paying Agent for the account of the Board of Liquidation of a specified sum plus accrued interest to the date of delivery.

Except for the requirements of subsection (d) of this Section (which may be waived by the purchasers of such Bonds by an instrument or concurrent instruments in writing signed by such purchasers), none of the requirements in this Section may be waived without the consent of the holders of not less than a majority in aggregate Principal Amount of the Outstanding Bonds.

# SECTION 4.04. Other Senior Parity Indebtedness.

- (a) The Board may incur or refinance Other Senior Parity Indebtedness provided that:
- (i) the documents relating to the Other Senior Parity Indebtedness acknowledge that such debt constitutes Other Senior Parity Indebtedness under this Resolution and is subject to the applicable terms and conditions hereof as if it were Bonds, and specify the amounts and due dates of Annual Debt Service with respect to the Other Senior Parity Indebtedness,
- (ii) the requirements of Sections 4.03(h) or 4.03(i), as appropriate, have been met as if the Other Senior Parity Indebtedness was an additional Series of Bonds,
- (iii) the Paying Agent receives written notice of the issuance of the Other Senior Parity Indebtedness and the material terms and conditions thereof and the Paying Agent shall register the holder as owner thereof as such on its books and records, and
- (iv) the Paying Agent and the Board of Liquidation receive a Counsel's Opinion that the documents creating the Other Senior Parity Indebtedness have been duly authorized, executed and delivered on behalf of the Board and constitute valid, binding and enforceable obligations.

In connection with the incurrence of any Other Senior Parity Indebtedness that is not issued under and secured by a Supplemental Resolution, the Board of Liquidation shall enter into an intercreditor arrangement with the holder of such Other Senior Parity

Indebtedness, the terms of which shall be consistent with the requirements of this Resolution and determined at the time of incurrence of such Other Senior Parity Indebtedness.

(b) The Board shall fulfill its obligations under all contracts or agreements creating Other Senior Parity Indebtedness as they may exist from time to time.

SECTION 4.05. <u>Subordinate Debt</u>. Notwithstanding anything in this Resolution to the contrary, the Board may at any time issue additional Subordinate Debt and pledge Net Revenues thereto on a basis subordinate to Senior Debt so long as the Paying Agent is furnished a certificate of an Authorized Officer of the Board or of a Qualified Independent Consultant, as the case may be, that would meet the requirements of Section 4.03(h)(ii) if the proposed Subordinate Debt were Bonds except for the fact that the debt service on the proposed Subordinate Debt would not constitute Annual Debt Service on Senior Debt for purposes of the certification required by that Section. Subordinate Debt may not be accelerated if any Senior Debt is outstanding.

SECTION 4.06. <u>CEA GO Zone Indebtedness and DPW Payments</u>. Notwithstanding anything to the contrary contained herein, <u>the DPW Payments and CEA GO Zone Indebtedness</u> shall not be included in any Additional Indebtedness Test under Sections 4.03, 4.04 or 4.05 hereof or any Rate Covenant calculation as provided in Section 7.01.

SECTION 4.07. <u>Take-or-Pay Contracts</u>. The provision for payments under Take-or-Pay Contracts may be treated as Operating Expenses if, prior to the Board's entering into such a contract that exceeds an annual obligation which is in excess of 2% of Revenues as calculated for the Fiscal Year immediately preceding the date of incurrence of the Take-or-Pay Contract, a Qualified Independent Consultant certifies that in doing so the Board is not reasonably expected to impair its ability to fulfill the Rate Covenant during the next five years. Additionally, any Take-or-Pay Contract with a stated term in excess of five (5) years shall be deemed to be Indebtedness. If the Qualified Independent Consultant does not deliver such certificate, payments under the Take-or-Pay Contracts shall be deemed to be Indebtedness and may be incurred only if the provisions of Section 4.03, 4.04 or 4.05, as the case may be, are complied with.

#### ARTICLE V

#### REDEMPTION OF BONDS

SECTION 5.01. Redemption Provisions to be Fixed by Supplemental Resolution. The Bonds of any Series shall be subject to mandatory, extraordinary or optional redemption prior to maturity on such dates and under such conditions as may be provided in the Supplemental Resolution authorizing the issuance of such Series of Bonds. The Bonds of any Series to be called for redemption shall be selected as provided in the applicable Supplemental Resolution. The Paying Agent shall treat each Bond of a denomination greater than the minimum denomination authorized in the applicable Supplemental Resolution as representing the number of separate Bonds of such minimum denomination as can be obtained by dividing the Bond's actual Principal Amount by such minimum denomination.

SECTION 5.02. Notice of Redemption. Unless otherwise provided in the applicable Supplemental Resolution, the Paying Agent shall, upon receipt of written notice from the Board of Liquidation specifying the information contained in this paragraph and given at least five (5) Business Days before the date the Paying Agent is requested to issue such Notice, send notice of the call for redemption, identifying the Bonds or portions thereof to be redeemed, not less than 30 days prior to the redemption date, (a) by registered or certified mail or overnight express delivery or via accepted form of electronic communication, to the Holder of each Bond to be redeemed at the address as it appears on the registration books kept by the Paying Agent, and (b) to each nationally recognized municipal securities information repository designated as such by the Securities and Exchange Commission.

In preparing and delivering such notice, the Paying Agent shall take into account, to the extent applicable, the prevailing tax-exempt securities industry standards and any regulatory statement of any Federal or state administrative body having jurisdiction over the Board of Liquidation or the tax-exempt securities industry. Failure to give any notice specified in (a) above, or any defect therein, shall not affect the validity of any proceedings for the redemption of any Bond with respect to which no such failure or defect has occurred. Failure to give any notice specified in (b) above, or any defect therein, shall not affect the validity of any proceedings for the redemption of any Bonds with respect to which the notice specified in (a) above is correctly given.

In the case of an optional redemption, the notice may state (i) that it is conditioned upon the deposit of moneys, in an amount equal to the amount necessary to effect the redemption, with the Paying Agent no later than the redemption date, or (ii) that the Board of Liquidation retains the right to rescind such notice at any time prior to the scheduled redemption date if the Board of Liquidation delivers a certificate of an Authorized Officer to the Paying Agent instructing the Paying Agent to rescind the redemption notice (in either case, a "Conditional Redemption"), and such notice and optional redemption shall be of no effect if such moneys are not so deposited or if the notice is rescinded as described herein. The Paying Agent shall give prompt notice of such rescission to the affected Bondowners. Any Bonds subject to Conditional Redemption where redemption has been rescinded shall remain Outstanding, and the rescission shall not constitute an Event of Default. Further, in the case of a Conditional Redemption, the failure of the Board

of Liquidation to make funds available in part or in whole on or before the redemption date shall not constitute an Event of Default.

Any notice mailed or provided herein shall conclusively be presumed to have been given whether or not actually received by any Bondholder.

SECTION 5.03. <u>Bonds Payable on Redemption Date</u>; <u>Interest Ceases to Accrue</u>. On or before the date fixed for redemption, moneys shall be deposited with the Paying Agent to pay the principal of and premium, if any, and interest accrued to the redemption date on the Bonds called for redemption. Upon the happening of the conditions of this Section, the Bonds or portions thereof thus called for redemption shall cease to bear interest from and after the redemption date, shall no longer be entitled to the benefits provided by this Resolution and shall not be deemed to be Outstanding under the provisions of this Resolution.

SECTION 5.04. Purchase of Bonds. The Board or Board of Liquidation may purchase or cause to be purchased any Bonds of any particular Series or maturity in lieu of redemption of such Bonds (in which event any Bonds so purchased shall be cancelled and shall cease to bear interest as provided in Sections 3.08 and 5.03) or for any other purpose pursuant to written instructions given by the Board or Board of Liquidation to the Paying Agent. Such purchases shall be made in such manner as directed by the Board or Board of Liquidation. The Board, the Board of Liquidation or the Paying Agent shall pay the purchase price of such Bonds together with accrued interest thereon from such funds as maybe available therefor pursuant to this Resolution, any Supplemental Resolution, or as otherwise may be made available by the Board or the Board of Liquidation.

#### ARTICLE VI

# CUSTODY AND APPLICATION OF BOND PROCEEDS AND PAYMENTS IN AID OF CONSTRUCTION

SECTION 6.01. <u>Custody and Application of Bond Proceeds</u>. There is hereby established a Construction Fund to be held by the Board of Liquidation, subject to the lien of this Resolution. The Construction Fund shall constitute the special Water Revenue Bond account referred to in Louisiana Revised Statute 33:4096, as amended or supplemented from time to time.

The proceeds of a Series of Bonds which are to be used to pay Costs shall be deposited in the related Series Construction Account and held in trust by the Board of Liquidation and used solely to pay Costs and Costs of Issuance, except as provided herein. The proceeds of a Series of Bonds which are to be used to refund any Indebtedness secured by or payable from Net Revenues shall be held by the Paying Agent, an Escrow Trustee (as defined in Section 13.01) or other Fiduciary, as specifically provided in the Supplemental Resolution related to such refunding.

The Board of Liquidation may establish additional Accounts and subaccounts within the Construction Fund as may be provided in a Supplemental Resolution. Deposits shall be made to the credit of the Construction Fund and any Accounts and subaccounts as provided in such Supplemental Resolution. All earnings on moneys in each Account and subaccount shall be credited to such Account and subaccount.

Payments from the applicable Series Construction Account or other Account or subaccount of the Construction Fund shall be made in accordance with the provisions of this Section. Such amounts shall be disbursed pursuant to warrants drawn by the Board under the provisions of Louisiana Revised Statute 33:4094, or in such manner as the Board and the Board of Liquidation shall agree, if such statute no longer exists.

Upon completion of all Projects the Board reasonably expects to fund from any Account or subaccount in the Construction Fund, the Board shall file with the Board of Liquidation a final certificate of an Authorized Officer setting forth the balance, if any, remaining in the applicable Account or subaccount in the Construction Fund not required for the payment of Costs of Issuance or for the payment of Cost of such Projects. Any such balance shall be applied by the Board of Liquidation, at the direction of the Board (i) to additional Costs by deposit of such amount in another and separate Account or subaccount in the Construction Fund, or (ii) to the redemption of the Bonds of the Series for which such Series Construction Account was established by deposit of such amount in the Principal Account of the Debt Service Fund.

Notwithstanding anything herein to the contrary, upon occurrence of an Event of Default, any amounts remaining in any Series Construction Account for which warrants have not yet been received by the Board of Liquidation shall be transferred to the Debt Service Fund and applied in accordance with Section 10.06 hereof.

### ARTICLE VII

## **REVENUES AND FUNDS**

## SECTION 7.01. Rate Covenant.

- (a) The Board shall fix, charge and collect such rates, fees and other charges for the use of and the services furnished by the System and shall, from time to time and as often as shall appear necessary, revise such rates, fees and other charges so as to meet the following three independent requirements:
  - (i) Rate Covenant Net Revenues shall be sufficient in each Fiscal Year (the "Tested Fiscal Year") to pay (A) the amount required to pay Annual Debt Service on Senior Debt in such Fiscal Year, (B) any amount necessary to be deposited in any Series Debt Service Reserve Account to restore the amount on deposit therein to the applicable Series Debt Service Reserve Requirement, (C) the amount required to pay Annual Debt Service on Subordinate Debt in such Fiscal Year (including reserves in connection therewith and the required restoration thereof), (D) any amount necessary to be deposited in the Operating Reserve Fund to maintain the required balance therein and (E) all other amounts which the Board may by law or contract be obligated to pay.
  - (ii) Rate Covenant Net Revenues shall be sufficient in each Tested Fiscal Year to be at least equal to each of the following: (A) 125% of the Annual Debt Service with respect to Senior Debt for such Fiscal Year; and (B) 110% of the aggregate Annual Debt Service with respect to Senior Debt and Subordinate Debt for such Fiscal Year.
  - (iii) Rate Covenant Net Revenues excluding transfers from the Rate Stabilization Fund to the Revenue Fund (as provided in Section 7.05 hereof) and the proceeds of Grants in each Tested Fiscal Year shall at least equal 100% of Annual Debt Service on Senior Debt and Subordinate Debt for such Fiscal Year.

In all cases, Annual Debt Service related to the CEA GO Zone Indebtedness and all DPW Payments shall be excluded from the foregoing calculations.

The Board shall test for compliance with this Section 7.01(a) within 120 days after the end of each Tested Fiscal Year.

- (b) If, subject to the provisions of subsection (c) below, the Rate Covenant Net Revenues are less than the amounts specified in (a) above, the Board must take appropriate action under the law and subsection (d) below within its powers to revise the Board's rates, fees and other charges or the method of operation of the System in order to satisfy the foregoing requirements in the next Fiscal Year following the Tested Fiscal Year (the "Current Fiscal Year").
- (c) For purposes of this Section, the Board shall not be deemed to have failed to comply with the Rate Covenant and shall not be required to implement the procedures set forth in subsection (b) hereof, if an Authorized Officer of the Board certifies in writing that the Rate

Covenant Net Revenues the Board would have received in the Tested Fiscal Year would have been sufficient to meet the requirements of subsection (a) hereof if the Revenues for the Tested Fiscal Year were determined by giving effect for the entire Tested Fiscal Year to any increase or decrease in rates, fees, rentals or other charges already authorized by the Board, the Board of Liquidation, and the City to be implemented on a date that is within 120 days after the end of the Tested Fiscal Year.

- (d) If the Board fails to comply with the Rate Covenant, the Board shall immediately request a Qualified Independent Consultant to submit a written report and recommendations with respect to increases in the Board's rates, fees and other charges and improvements in the operations of and the services rendered by the System and the Board's accounting and billing procedures necessary to bring the Board into compliance with the Rate Covenant. Any failure to meet the Rate Covenant will not constitute an Event of Default under this Resolution if within 180 days after the end of the Tested Fiscal Year, (1) the report and recommendations of the Qualified Independent Consultant shall be filed with the Board of Liquidation and the Board, and (2) the Board shall revise its rates, fees and charges, and alter its operations and services to conform with the report and recommendations of the Qualified Independent Consultant to the extent permitted by law.
- (e) If the Board fails for three consecutive months to make the deposits required by Section 7.04 to the Interest Account and the Principal Account (or the Sinking Fund Account, as applicable), or if there is a deficiency in the Debt Service Reserve Fund for which the Board has not made required restoration payments for three consecutive months, the Board shall immediately request a Qualified Independent Consultant to submit a written report and recommendations with respect to increases in the Board's rates, fees and other charges and improvements in the operations of and the services rendered by the System and the Board's accounting and billing procedures necessary to bring the Board into compliance with the Rate Covenant. The report and recommendations shall be filed with the Board of Liquidation and the Board within 60 days from the date of discovery of failure to make the required deposits, and within 90 days from the receipt of such report, the Board shall revise its rates, fees and charges, and alter its operations and services to conform with the report and recommendations of the Qualified Independent Consultant to the extent permitted by law.

### SECTION 7.02. Annual Budget.

- (a) Before the beginning of each Fiscal Year, the Board shall adopt a budget for the operation of the System for the ensuing Fiscal Year, which shall be called the Annual Budget.
- (b) The Annual Budget shall be prepared in such manner as to show in reasonable detail:
  - (i) Revenues estimated to be received during such Fiscal Year,
  - (ii) Operating Expenses expected to be incurred during such Fiscal Year,
  - (iii) the amount of principal of, premium, if any, and interest on the Indebtedness that will become due during such Fiscal Year,

- (iv) any amount necessary to be deposited in the Debt Service Reserve Fund to restore the amount on deposit in each Account therein to the amount of the applicable Series Debt Service Reserve Requirement,
- (v) any amount necessary to be deposited in the Operating Reserve Fund to restore the amount on deposit therein to the amount of the Operating Reserve Requirement,
- (vi) the amount of principal of, premium, if any, and interest on the Subordinate Debt that will become due during such Fiscal Year,
- (vii) any amount necessary to be deposited in the Subordinate Debt Debt Service Reserve Fund to restore the amount on deposit therein to the amount of the Subordinate Debt Debt Service Reserve Requirement, and
- (viii) the amount of Net Revenues available during such Fiscal Year to meet the Rate Covenant.

The Annual Budget shall be prepared in sufficient detail to show the amounts to be deposited in the various funds, Accounts and subaccounts created by or under this Resolution or Funds and Accounts otherwise required to be maintained on behalf of the System.

- (c) The Board may amend the Annual Budget at any time during the Fiscal Year.
- (d) If for any reason an Annual Budget has not been adopted within the time required by subsection (a) of this Section, the last previously adopted Annual Budget shall be deemed to provide for and regulate and control expenditures during such Fiscal Year until an Annual Budget for such Fiscal Year has been adopted.

A copy of the Annual Budget and any amendments thereto shall be filed promptly with the Board of Liquidation.

SECTION 7.03. <u>Funds and Accounts.</u> In addition to the Construction Fund established in Section 6.01 hereof, there are hereby established the following Funds and Accounts to be held by the Board or Board of Liquidation, as applicable:

- (a) Revenue Fund to be held by the Board, subject to the lien of the Resolution;
- (b) Operating Fund to be held by the Board, not subject to the lien of the Resolution;
- (c) Debt Service Fund, in which there shall be established an Interest Account, a Principal Account and a Sinking Fund Account, and a separate subaccount in each such Account with respect to (i) all Series of Common Debt Service Reserve Secured Bonds and (ii) each Series of Separately Secured Debt Service Reserve Fund Bonds; and (iii) each incurrence of Senior Parity Indebtedness, to be held by the Board of Liquidation, subject to the lien of the Resolution;

- (d) Debt Service Reserve Fund to be held by the Board of Liquidation, subject to the lien of the Resolution, in which there shall be established (1) a Series Debt Service Reserve Account for all Series of Common Debt Service Reserve Secured Bonds, and (2) as applicable, a Series Debt Service Reserve Account for each Series of Bonds that has a Separate Series Debt Service Reserve Requirement;
- (e) Operating Reserve Fund to be held by the Board, subject to the lien of the Resolution;
- (f) Subordinate Debt Debt Service Fund to be held by the Board of Liquidation, subject to the lien of the Resolution;
- (g) Subordinate Debt Debt Service Reserve Fund to be held by the Board of Liquidation, subject to the lien of the Resolution;
- (h) Rate Stabilization Fund to be held by the Board, subject to the lien of the Resolution;
- (i) Water System Fund to be held by the Board, subject to the lien of the Resolution; and
- (j) Redemption Fund to be held by the Board of Liquidation, subject to the lien of this Resolution.

SECTION 7.04. <u>Disposition of Revenues</u>. All Revenues shall be deposited in the Revenue Fund to be held by the Board; provided, however, that upon an Event of Default, the Board will transfer all amounts in all Board held funds (other than the Operating Fund) to the Board of Liquidation, and the Board of Liquidation shall hold such moneys in trust for the beneficiaries hereunder.

Prior to any such Event of Default, throughout the month but no later than the 20<sup>th</sup> day of each month, the Board shall transfer from the Revenue Fund to the Operating Fund an amount sufficient to pay Operating Expenses during such month. Thereafter, Net Revenues shall be disbursed by the Board no later than the 20<sup>th</sup> day of each month in the following order (except that no distinction or preference shall exist in the use in an amount sufficient to make the following deposits of Net Revenues for payment into the Interest Account, the Principal Account or the Sinking Fund Account of the Debt Service Fund, such accounts being on a parity with each other as to payment from Net Revenues):

### (a) To the Debt Service Fund:

(i) to the subaccounts established for each Series of Bonds or Other Senior Parity Indebtedness into the Interest Account, monthly, on or before the 20<sup>th</sup> day of each month, an amount equal to 1/6 of the amount of interest falling due on the next interest payment date, or such other proportionate amount as shall be necessary to ensure monthly deposits for the payment in full of interest on the next interest payment date, as set forth in the applicable Supplemental Resolutions with respect to each Series of Bonds or Other Senior Parity Indebtedness; provided, however, that if such Other Senior Parity

Indebtedness is evidenced by documents other than a Supplemental Resolution, to the related interest accounts set forth therein, as applicable; and such deposits shall be adjusted to give credit for any other available money then in such interest account or subaccount or otherwise available and designated to be used for such purpose. Moneys in the Interest Account shall be used to pay interest required to be paid on any interest payment date (including any redemption date other than a mandatory sinking fund redemption date) related to such Series of Bonds or Other Senior Parity Indebtedness, as applicable.

- To the subaccounts established for each Series of Bonds or Other Senior (ii) Parity Indebtedness into the Principal Account and Sinking Fund Account, monthly, on or before the 20<sup>th</sup> day of each month, an amount equal to 1/12 of the amount of principal falling due on the next principal payment date or redemption amount due on the next sinking fund redemption date, as applicable, or such other proportionate amount as shall be necessary to ensure monthly deposits for the payment in full of principal on the next principal payment date or sinking fund redemption date, as set forth in the applicable Supplemental Resolutions with respect to each Series of Bonds or Other Senior Parity Indebtedness; provided, however, that if such Other Senior Parity Indebtedness is evidenced by documents other than a Supplemental Resolution, to the related principal and sinking find accounts set forth therein, as applicable; and such deposits shall be adjusted to give credit for any other available money then in the principal or sinking find account or subaccount or otherwise available and designated to be used for such purpose. Moneys in the Principal Account shall be used to pay principal required to be paid on any principal payment date related to such Series of Bonds or Other Senior Parity Indebtedness, as applicable. Moneys in the Sinking Fund Account shall be used to pay the amount required for mandatory sinking fund redemption on the applicable redemption date (including any redemption date other than a mandatory sinking fund redemption date) related to such Series of Bonds or Other Senior Parity Indebtedness, as applicable.
- (b) To the Debt Service Reserve Fund the amounts, if any, required to be deposited pursuant to (i) Section 7.06 hereof, to restore the amount on deposit in each Series Debt Service Reserve Account to the related Series Debt Service Reserve Requirement or to reimburse the provider of any Credit Facility deposited in the Debt Service Reserve Fund, and (ii) a Supplemental Resolution, to fund a Series Debt Service Reserve Account to the applicable Separate Series Debt Service Reserve Requirement, and such amounts shall be transferred to the appropriate Series Debt Service Reserve Account.
- (c) To the Subordinate Debt Service Fund, the amount equal to the deposits to such Funds and Accounts required by the related Supplemental Resolution or other documents evidencing such debt. To the extent that the Subordinate Debt is issued pursuant to Subordinate Debt documents, applicable amounts shall be transferred to the respective Subordinate Debt trustee. In addition, to the extent that moneys on deposit in the Debt Service Fund are insufficient to make the required interest and principal payments on Senior Debt, moneys in the Subordinate Debt Service Fund shall be used, prior to any withdrawal from the Debt Service Reserve Fund, to cure any such deficiencies, but only after withdrawals from the Water System Fund, the

Operating Reserve Fund and any Subordinate Debt Debt Service Reserve Fund, in that order, for that purpose.

- (d) To Subordinate Debt Debt Service Reserve Fund with respect to each Subordinate Debt issue the amounts, if any, necessary to restore the amount on deposit therein to the related Subordinate Debt Debt Service Reserve Requirement. To the extent that the Subordinate Debt is issued pursuant to Subordinate Debt documents, applicable amounts shall be transferred to the respective Subordinate Debt fiduciary.
- (e) To the Operating Reserve Fund the amounts, if any, necessary to restore the amounts on deposit therein to the Operating Reserve Requirement. Such amounts shall be funded within 24 months of withdrawal by depositing in such fund 1/24 of the Operating Reserve Requirement on the last Business Day of each month after such withdrawal, if necessary. Moneys in the Operating Reserve Fund shall be used to pay, to the extent necessary, Operating Expenses of the Board. In addition, to the extent that moneys on deposit in the Debt Service Fund are insufficient to make the required interest and principal payments on Senior Debt, moneys in the Operating Reserve Fund shall be used, prior to any withdrawal from the Subordinate Debt Service Fund, any Subordinate Debt Debt Service Reserve Fund, and then the Debt Service Reserve Fund, in that order, to cure any such deficiencies, but only after withdrawals from the Water System Fund for that purpose.
- (f) To the Water System Fund, any moneys remaining in the Revenue Fund after all deposits and transfers required by subsections (a) through (e) of this Section have been made. To the extent that moneys on deposit in the Debt Service Fund are insufficient to make the required interest and principal payments on Senior Debt, moneys in the Water System Fund shall be transferred to the Debt Service Fund, and then there shall be withdrawals from the Operating Reserve Fund, the Subordinate Debt Service Fund, any Subordinate Debt Service Reserve Fund, and the Debt Service Reserve Fund, in that order, to cure any such deficiencies. If not needed for that purpose, moneys in the Water System Fund may be used for any authorized purpose, including but not limited to transfers in an amount that the Executive Director may determine, in his discretion, to transfer to the Rate Stabilization Fund or the Debt Service Fund to be used to redeem Bonds as herein provided for deposit in any Account therein. Notwithstanding the foregoing, moneys in the Water System Fund shall be used on January 15 and July 15 of each year through July 15, 2026, to pay an amount to the Board of Liquidation necessary to make those certain principal and interest payments related to the CEA GO Zone Indebtedness and on any date on which funds are available to make the DPW Payments; provided, however, that if the Board does not have Net Revenues sufficient to make such payments when required, the Board will make such payments to the Board of Liquidation or the City when and if Net Revenues are available, and the failure to make such payments shall not constitute an Event of Default under this Resolution. Additionally, moneys remaining in the Water System Fund to the extent all transfers required by subsection (a) through (f) of this section have been made, shall be applied for any lawful purpose of the Board.

The Board shall provide the Board of Liquidation with a monthly certificate which certifies that the transfers required by the foregoing subsections have been made and the specified respective balances of such funds. If the Board fails to make the transfers required by subsections (a) through (f) of this Section, the Board of Liquidation shall give notice of such

failure to the Board within 10 days of such failure. Notwithstanding anything in this Resolution to the contrary, at any time that the Board is required to make transfers pursuant to subsections (a) through (f) of this Section, and there are insufficient Net Revenues to make all required transfers pursuant to such subsections, the Board shall make the transfers in the order set forth above first from Net Revenues, then from any other legally available monies.

In the event this Section requires transfers to the Debt Service Fund or the Debt Service Reserve Fund from any Fund held by the Board, the Board shall effect that transfer to the Board of Liquidation in accordance with this Section.

The Board of Liquidation shall provide for a mandatory sinking fund redemption of any Term Bonds in accordance with the schedules set forth in the Supplemental Resolution for such Bonds; provided, however, that on or before the 45th day next preceding any such sinking fund payment date, the Board may:

- (i) deliver to the Board of Liquidation for cancellation Term Bonds of the maturity required to be redeemed on such sinking fund payment date in any aggregate Principal Amount desired; or
- (ii) instruct the Board of Liquidation to apply a credit against the Board's next sinking fund redemption obligation for any such Term Bonds that previously have been redeemed (other than through the operation of the sinking fund) and canceled but not theretofore applied as a credit against any sinking fund redemption obligation.

Upon the occurrence of any of the events described in the subsections (i) or (ii) above, the Board of Liquidation shall credit against the Board's sinking fund redemption obligation on the next sinking fund payment date the amount of such Term Bonds so delivered or previously redeemed. Any Principal Amount of such Term Bonds in excess of the Principal Amount required to be redeemed on such sinking fund payment date shall be similarly credited in such order as may be determined by the Board against future payments to the Sinking Fund Account and shall similarly reduce the Principal Amount of the Term Bonds of the applicable Series to be redeemed on the next sinking fund payment date. Within seven days of receipt of such Term Bonds or instructions to apply as a credit, any amounts remaining in the Sinking Fund Account in excess of the amount required to fulfill the remaining required sinking fund redemption obligation on the next sinking fund payment date shall be used in such manner as determined at the direction of the Board of Liquidation.

In the event the amount on deposit in the Interest Account on any interest payment date exceeds the amount required to pay interest on the Senior Debt on the next interest payment date, the Board shall, if the amount on deposit in any Series Debt Service Reserve Account is less than the applicable Series Debt Service Reserve Requirement, transfer such excess to any Series Debt Service Reserve Account to the extent of such deficiency (on a *pro rata* basis if funds are not sufficient to cause the Series Debt Service Reserve Requirement to be fully funded at the Common Debt Service Reserve Requirement or Separate Series Debt Service Reserve Requirement), and otherwise retain any remaining excess in the Interest Account or transfer any remaining excess to the related Principal Account to be credited against subsequent required deposits thereto, as determined by the Board of Liquidation.

In the event the amount on deposit in the Principal Account or Sinking Fund Account on any principal or mandatory redemption payment date exceeds the amount required on such date to pay Bonds at maturity or to redeem Term Bonds pursuant to mandatory sinking fund requirements, the Board shall, if the amount on deposit in any Series Debt Service Reserve Account is less than the applicable Series Debt Service Reserve Requirement, transfer such excess to the Series Debt Service Reserve Account to the extent of such deficiency (on a *pro rata* basis if funds are not sufficient to cause the Series Debt Service Reserve Requirement to be fully funded at the Common Debt Service Reserve Requirement or Separate Series Debt Service Reserve Requirement), and otherwise retain such excess in the Principal Account or transfer such excess to the Interest Account to be credited against subsequent required deposits thereto, as determined by the Board of Liquidation.

SECTION 7.05. <u>Rate Stabilization Fund.</u> The Rate Stabilization Fund authorized by Section 7.03 shall be held by the Board in an Account separate and apart from all other funds and Accounts of the Board and payments therefrom shall be made as hereinafter provided. Moneys may be transferred by the Executive Director to the Rate Stabilization Fund from the Revenue Fund as provided in Section 7.04 as determined by the Executive Director. At any time the Board shall transfer from the Rate Stabilization Fund to the Revenue Fund an amount determined by the Executive Director.

# SECTION 7.06. Debt Service Reserve Fund.

- (a) The Series Debt Service Reserve Account maintained for all Common Debt Service Reserve Secured Bonds shall be funded at all times to the Common Debt Service Reserve Requirement, and all other Series Debt Service Reserve Accounts shall be funded at all times to the applicable Separate Series Debt Service Reserve Requirement as set forth in a Supplemental Resolution. Amounts in each Series Debt Service Reserve Account shall be used to pay debt service on the related Series of Bonds on the date such debt service is due if insufficient funds for that purpose are available in the related Series subaccount in the Interest Account and the related Series subaccount in the Principal Account (but only to the extent amounts in such subaccounts are less than the amounts required). Amounts in each Series Debt Service Reserve Account shall be pledged to Holders of the Bonds secured by such Series Debt Service Reserve Account.
- (b) Within five Business Days after each Reserve Determination Date, the Board of Liquidation shall determine if the balance on deposit in each Series Debt Service Reserve Account was, as of the Reserve Determination Date, at least equal to the applicable Series Debt Service Reserve Requirement. In making such determination, any obligations in the Series Debt Service Reserve Account shall be valued in accordance with Section 8.01.
- (c) In the event the amount on deposit in a Series Debt Service Reserve Account exceeds the applicable Series Debt Service Reserve Requirement, the Board of Liquidation shall (a) transfer such excess to the Debt Service Fund to be deposited in the related Series subaccount in the Interest Account and the related Series subaccount in the Principal Account to the extent amounts in such subaccounts are less than the amounts required to be paid on the next interest payment date and principal payment date, respectively, and (b) transfer such excess to the Board to be used to pay all or any portion of Costs designated by the Board and approved by Bond

Counsel; provided, however, that if an Authorized Officer of the Board calls for a Reserve Determination Date in connection with the refunding and/or defeasance of a Series of Bonds, then the Board of Liquidation is authorized to take such refunding and/or defeasance into account in valuing the Series Debt Service Reserve Account securing such Series of Bonds and is further authorized to direct the Board of Liquidation to transfer the amount of any surplus arising from such valuation to the Debt Service Fund.

- (d) If at any time it shall be necessary to use moneys in the Debt Service Reserve Fund for the purpose of paying principal or interest on Bonds secured by a Series Debt Service Reserve Account as to which there would otherwise be a default, then the moneys so used shall be replaced within twenty-four (24) months by depositing in the Debt Service Reserve Fund twenty-four (24) substantially equal consecutive monthly deposits, commencing not later than the month following the occurrence of such deficiency. In the event of a deficiency in more than one Series Debt Service Reserve Account, the Board of Liquidation shall credit each deposit required in this Section 7.06(d) to each Series Debt Service Reserve Account in which such a deficiency exists on a pro rata basis.
- In lieu of or in addition to cash or Permitted Investments, at any time the Board may cause to be deposited to the credit of any Series Debt Service Reserve Account any form of Credit Facility, including a reserve fund surety bond, in the amount of all or a portion of the Series Debt Service Reserve Requirement, irrevocably payable to the Board of Liquidation or the Paying Agent as beneficiary for the Holders of the respective Series of Bonds, provided that (a) the Credit Facility provider has a credit rating in one of the three highest credit rating categories by at least one Rating Agency at the time the Credit Facility is deposited in the Series Debt Service Reserve Account, (b) the obligation of the Board to pay the fees of and to reimburse the provider of the Credit Facility is subordinate to its obligation to pay debt service on the respective Series of Bonds, (c) the initial term of the Credit Facility is at least 36 months, (d) the only condition to a drawing under the Credit Facility is insufficient amounts in the applicable Funds and Accounts held by the Board of Liquidation with respect to such Series of Bonds when needed to pay debt service on such Series or the expiration of the Credit Facility, and (e) the provider of the Credit Facility shall notify the Board and the Board of Liquidation at least 18 months prior to the expiration of the credit facility. If (1) the Board receives such expiration notice and the provider of such Credit Facility does not extend its expiration date, or (2) the Board receives notice of the termination of the Credit Facility, the Board shall (A) immediately provide a substitute credit facility that meets the requirements set forth in the foregoing sentence, or (B) replenish the Series Debt Service Reserve Account to the applicable Series Debt Service Reserve Requirement by making the deposits required in Section 7.06(d) hereof and/or, if applicable, initiating a draw on such Credit Facility.

If a disbursement is made pursuant to any Credit Facility, the Board shall either (a) replenish the applicable Series Debt Service Reserve Account to the applicable Series Debt Service Reserve Requirement by making the deposits required in Section 7.06(d) hereof, or (b) reinstate the maximum limits of such Credit Facility within twenty-four (24) months pursuant to the terms of the Credit Facility.

Amounts, if any, released from any Series Debt Service Reserve Account upon deposit to the credit of such Account of a Credit Facility shall, upon designation by an Authorized Officer

of the Board, accompanied by an Opinion of Bond Counsel that such use will not adversely affect the exclusion from gross income of interest on the respective Series of Bonds, be transferred by the Board of Liquidation (a) to the subaccount of the Principal Account with respect to such Series of Bonds and used to pay principal of or to redeem such Bonds, or (b) to the Board to be used to pay all or any portion of the Costs designated by the Board and approved by Bond Counsel.

SECTION 7.07. Redemption of Bonds. The Board of Liquidation shall have the authority to create a separate Account within the Debt Service Fund for each Series of Bonds, as necessary, into which it shall deposit (1) any moneys transferred from the Water System Fund for such purpose as directed by the Board, , and (2) any other moneys (other than proceeds of Bonds which are to be used to redeem Indebtedness) which may be available to the Board of Liquidation to redeem bonds in advance of maturity and which the Board has requested the Board of Liquidation to so use. The Board of Liquidation shall hold the amounts in any Account in the Debt Service Fund in trust solely for the benefit of the holders of the Bonds for which such Account was created and use such amounts to redeem such Bonds in advance of maturity; provided, however, that the Board of Liquidation may deposit any such amounts to an Escrow Trustee (as defined in Section 13.01) to be held in trust solely for the benefit of the holders of the Bonds for which such Account was created and used to redeem such Bonds in advance of maturity.

Notwithstanding the foregoing, if at any time the amount on deposit and available therefor in the Interest Account or Principal Account of the Debt Service Fund is insufficient to pay the principal of and interest on the Bonds then due, the Board of Liquidation shall withdraw from the any Account established to redeem Bonds (other than amounts held therein for the redemption of the Bonds for which (i) a notice of redemption shall have been given and/or (ii) Government Securities have been purchased with the effect of defeasing such Bonds pursuant to the terms of the Supplemental Resolution providing for the issuance of such Bonds) and deposit in the Debt Service Fund the amount necessary to meet the deficiency.

SECTION 7.08. Payments In Aid of Construction. The Board shall use any payments made to the Board by any persons as payment for constructing water, wastewater or stormwater facilities at the request of such persons, whether such payments are made prior to or after such construction, only to pay the cost of such construction. After completion of such construction, the Board may use any moneys remaining after such construction is completed to pay all or any portion of Costs designated by the Board and approved by Bond Counsel.

SECTION 7.09. Other Funds and Accounts. The Board may establish in each Supplemental Resolution such other funds and Accounts within funds as the Board may determine to be desirable.

SECTION 7.10. Pledge of Net Revenues and Certain Funds and Accounts. Net Revenues are hereby pledged equally and ratably to the payment of principal of and interest on all Senior Debt, subject only to the right of the Board and the Board of Liquidation to make application thereof to other purposes as provided herein. All funds created hereunder other than the Operating Fund shall be trust funds and are hereby pledged (except as provided in the next sentence hereof) equally and ratably to the payment of the principal of and interest on all Senior

Debt, subject only to the right of the Board or the Board of Liquidation to make application thereof to other purposes as provided herein. The lien and trust hereby created are for the benefit of the Holders of Senior Debt and for their additional security until all the Senior Debt has been paid; provided, however, that the Common Debt Service Reserve Secured Bonds or Separate Series Debt Service Reserve Secured Bonds shall only be secured by the account in the Debt Service Reserve Fund for Common Debt Service Reserve Secured Bonds or each Separate Series Account in the Debt Service Reserve Fund for Separate Series Debt Service Reserve Secured Bonds, and moneys in any account of the Debt Service Fund relating to a particular Senior Debt shall only secure such Senior Debt.

SECTION 7.11. <u>Disposition of Balances in Funds after Payment of Indebtedness.</u> After the principal of and premium, if any, and interest on all of the Indebtedness, any amounts required to be paid pursuant to the terms of this Resolution or any Supplemental Resolution and all expenses and charges herein required have been paid or provision therefor has been made, the Board of Liquidation shall pay to the Board any balance remaining in any fund then held by it.

SECTION 7.12. Acknowledgment of Board as Collection Agent for the City with Respect to Sanitation Charges. The Board, pursuant to a Cooperative Endeavor Agreement between the City and the Board, acts as collection agent for the City for certain sanitation charges which are identified as such on the billing statement (the "Sanitation CEA"). As of the date hereof, it is acknowledged that not all bills are paid in full. For all accounts processed and billed after January 1, 2014 for water rates and charges, sewer rates and charges, and sanitation charges, the Board is hereby authorized to account for such partial payments on a *pro rata* basis amongst the three billed amounts. Past due bills prior to January 1, 2014 shall be collected by the Board and paid to the City.

### **ARTICLE VIII**

### **INVESTMENT OF FUNDS**

# SECTION 8.01. <u>Investment of Funds.</u>

- (a) Any moneys held as part of any Fund or Account shall be invested or reinvested by the Board of Liquidation and by the Board at the direction of an Authorized Officer of the Board of Liquidation or the Board, as applicable, to the extent such investments are permitted by law in Permitted Investments. Prior to the filing of the certificate of completion related to improvements of the System which are financed with the proceeds of Bonds issued hereunder, all earnings on moneys held in the Construction Account shall be retained in such fund. Subsequent to the filing of the certificate of completion, the Board of Liquidation shall deposit any moneys remaining in a Construction Account in the Construction Fund to the related subaccount of the Interest Account of the Debt Service Fund. The investments shall have maturities consonant with the need for funds as estimated by the Board.
- (b) Any moneys held as part of the Debt Service Fund and not immediately required for the purposes of such respective fund, shall be invested or reinvested by the Board of Liquidation in Government Obligations that mature not later than the next date on which Principal on any Bonds is due and payable. Earnings on moneys held in the Series Account in the Debt Service Fund shall be transferred to the related subaccount of the Interest Account of the Debt Service Fund.
- (c) Any moneys held as part of the Revenue Fund, Operating Reserve Fund, Construction Fund, the Water System Fund and the Rate Stabilization Fund and not immediately required for the purposes of such respective Fund, as the case may be, shall be invested and reinvested by the Board in Permitted Investments.
- (d) Any moneys held as part of the Debt Service Reserve Fund shall be invested or reinvested by the Board of Liquidation in Permitted Investments that mature not later than five years from the date of acquisition of the investment or the final maturity of the applicable Series of Bonds unless invested in Permitted Investments that allow for a par withdrawal within 24 hours of notice.
- (e) Any moneys held as part of the Subordinate Debt Service Fund and Subordinate Debt Service Reserve Fund not immediately required for the purposes thereof, as the case may be, shall be invested or reinvested by the Board of Liquidation in Permitted Investments.
- (f) In computing the amount in any fund or Account created by this Resolution, except for the Debt Service Reserve Fund, obligations purchased as an investment of moneys therein shall be valued at cost or fair market value thereof, whichever is lower, plus accrued interest Investments in the Debt Service Reserve Fund shall be valued at least semiannually at the fair market value thereof plus accrued interest. Such valuations for each such fund or Account, other than the Debt Service Reserve Fund, shall be made by the party holding each such fund or Account at least annually not later than the end of each Fiscal Year and at such other times as the Board may deem appropriate.

(g) For the purposes of this Section, investment agreements shall be deemed to mature on the date on which amounts deposited thereunder may be withdrawn without penalty in accordance with the terms of such agreements.

The Board of Liquidation may sell or redeem any obligation in which moneys shall have been invested as provided in this Article to the extent necessary to provide cash in the respective funds or accounts, to make any payments required to be made therefrom or to facilitate the transfers of money between various Funds and Accounts as may be required or permitted from time to time pursuant to the provisions of this Article.

In computing the value of the assets of any fund or account established hereunder, investments and accrued interest thereon shall be deemed a part thereof

Notwithstanding provisions herein for transfer to or holding in particular Funds and Accounts amounts received or held by the Board and Board of Liquidation hereunder, for purposes of making, holding and disposing of investments, investments (except amounts held in any arbitrage rebate fund) in any and all Funds and Accounts created by this Resolution may be commingled (except amounts held in any arbitrage rebate fund), provided that, notwithstanding any such commingling, the Board and the Board of Liquidation shall at all times account for such investments in the Funds and Accounts to which they are credited and otherwise as provided in this Resolution.

The investments authorized by this Article shall at all times be subject to the provisions of applicable law, as amended from time to time. In the event that the Board and the Board of Liquidation, based upon an opinion of Bond Counsel, addressed to the Board and the Board of Liquidation, that it is necessary to restrict or limit the yield on the investment of any money or securities held in any fund in order to avoid the Bonds being considered "arbitrage bonds" within the meaning of section 148 of the Code, the Board and the Board of Liquidation shall take whatever action is necessary to properly restrict or limit the yield on the investment in accordance with such instructions.

### ARTICLE IX

### PARTICULAR COVENANTS

SECTION 9.01. Payment of Indebtedness; Limited Obligations. The Board and the Board of Liquidation shall promptly pay or cause to be paid when due the principal of (whether at maturity, by acceleration, call for redemption or otherwise) premium, if any, and interest on the Indebtedness at the places, on the dates and in the manner provided herein and in the Indebtedness according to the true intent and meaning thereof, provided, however, that such obligations are not general obligations of the Board but are limited obligations payable solely from Net Revenues, except to the extent payable from the proceeds of Indebtedness, the income, if any, derived from the investment thereof, certain reserves, proceeds of Credit Facilities, income from investments pursuant to this Resolution or proceeds of insurance, which Net Revenues and other moneys are hereby specifically pledged to such purposes in the manner and to the extent provided herein. The Indebtedness does not constitute a debt of the City of New Orleans, but is payable as to principal and interest solely from the Net Revenues pledged for that purpose.

SECTION 9.02. <u>Limitations on Indebtedness.</u> The Board shall not issue any bonds, notes or other obligations that shall be secured by a pledge of Net Revenues (a) senior to the pledge of Net Revenues securing the Senior Debt, (b) except in compliance with Section 4.03 or Section 4.04, on a parity with the pledge of Net Revenues securing the Senior Debt, or (c) except in compliance with Section 4.05, subordinate to the pledge of Net Revenues securing the Senior Debt. The Board shall not issue Bonds, Other Senior Parity Indebtedness or Subordinate Debt unless the Board complies with the provisions of Sections 4.03, 4.04 or 4.05, as applicable.

SECTION 9.03. <u>Covenants and Representations of Board.</u> The Board shall faithfully observe and perform all covenants, conditions and agreements on its part contained in this Resolution, in every issue of Indebtedness issued hereunder and in all proceedings of the Board pertaining thereto. The Board represents that it is duly authorized under the Act to issue the Indebtedness, to execute this Resolution, and to pledge Net Revenues in the manner and to the extent herein set forth. The Board covenants that it will take all action necessary for issuance of the Indebtedness and the execution of this Resolution, and that upon issuance the Indebtedness will be valid and enforceable obligations of the Board according to the import thereof.

SECTION 9.04. <u>Covenants with Credit Banks, Insurers, etc.</u> The Board may make such covenants and agreements in a Supplemental Resolution as it may determine to be appropriate with any insurer, credit bank or other financial institution that agrees to insure or to provide a Credit Facility. Such covenants and agreements may be set forth in the applicable Supplemental Resolution and shall be binding on the Board and all the holders of Indebtedness the same as if such covenants were set forth in full in this Resolution.

SECTION 9.05. Operation and Maintenance. The Board shall establish and enforce reasonable rules and regulations governing the use of and the services furnished by the System, shall maintain and operate the System in an efficient and economical manner, shall maintain the same in good repair and sound operating condition and shall make all necessary repairs, replacements and renewals. All compensation, salaries, fees and wages paid by the Board in

connection with the operation and maintenance of the System shall be reasonable. The Board shall observe and perform all of the terms and conditions contained in the Act, and comply with all valid acts, rules, regulations, orders and directions of any legislative, executive, administrative or judicial body applicable to the System or the Board.

# SECTION 9.06. Free Service, Competing Service, Billing and Enforcement of Charges.

- (a) The Board shall not permit connections to or use of the System or provide any services of the System without making a charge therefor in accordance with the Board's schedule of rates, fees and charges for the System other than those connections, use or services already in existence or as may be required by law; provided, however, the Board may accept proffers and other forms of payment in lieu of cash payments that the Board deems are in its best interest to accept, provided that such proffers do not cause a violation of the rate covenant set forth in Section 7.01.
- (b) The Board shall not provide, grant any franchise to provide or give consent for anyone else to provide any services which would compete with the System unless the Board determines that such franchise or provision of services would provide services that the Board has determined are not in its best interest to provide and would not materially impair the interests of the holders of Indebtedness.
  - (c) The Board shall bill customers for the services of the System on a regular basis.
- (d) If any rates, fees or other charges for the use of or for the services furnished by the System shall not be paid after the same shall become due and payable, the Board shall, to the extent permitted by applicable laws and regulations, disconnect the premises from the System or otherwise suspend service to such premises until such delinquent rates, fees or other charges and any interest, penalties or charges for reconnection of service to such delinquent customer shall have been paid in accordance with law, the policies of the Board, or a payment plan with respect to such amounts has become effective.

# SECTION 9.07. Sale or Encumbrance of System

(a) Neither the System nor any integral part thereof shall be leased, sold, mortgaged or otherwise disposed of without an Qualified Independent Consultant's certification that such disposition will not have a negative impact on the overall viability of the System unless the proceeds of such disposition, together with any other legally available moneys, are sufficient to pay the principal of, premium, if any, and interest on all Indebtedness then Outstanding and the proceeds are used for such purpose. The Board shall have and hereby reserves the right, however, to sell, lease, or otherwise dispose of any of the property comprising a part of the System in the following manner, if any one of the following conditions exists: (i) such property is not necessary for the operation of the System; (ii) such property is not useful in the operation of the System; (iii) such property will be advantageous to the System and will not adversely affect the security for the Bondholders. All proceeds of any such sale shall be deposited in the Water System Fund.

- (b) Prior to the sale or lease of assets constituting in excess of 3% of the net assets on the Board's most recent audited balance sheet to an entity other than a political subdivision, the Board shall:
  - (i) obtain a written report of a Qualified Independent Consultant, describing the financial impact of any such sale or lease on the Revenues, Net Revenues, and balance sheet of the Board;
  - (ii) obtain a written report of a Qualified Independent Consultant, setting forth alternatives to the proposed sale or lease of such assets and comparing such alternatives to the proposal;
  - (iii) obtain an opinion of a Qualified Independent Consultant to the effect that such sale or lease will not, in the current or any future Fiscal Year, result in the Board not meeting the required Rate Covenant or that Rate Covenant will be less than 100% of the Annual Debt Service on all Indebtedness to be Outstanding after such sale or lease. In reaching its conclusion, the Qualified Independent Consultant shall take into consideration such factors affecting the Net Revenues of the Board as the Consultant may deem significant, including (A) anticipated diminution of Net Revenues, (B) anticipated increases or decreases in Operating Expenses whether or not attributable to such sale or lease, and (C) the reduction in the Annual Debt Service attributable to the application of the sale proceeds to the provision for payment of Indebtedness theretofore Outstanding; and
  - (iv) make a written determination, approved by the Board, that the proposed sale or lease is more beneficial than (a) not entering into such sale or lease and (b) entering into one of the alternatives reviewed and presented by a Qualified Independent Consultant.

Notwithstanding anything in this Resolution to the contrary, the Board may acquire items of personal property constituting part of the System under lease purchase agreements or similar financing arrangements entered into in the ordinary course of business which may be subject to purchase money security interests or other liens in an aggregate amount not to exceed five percent (5%) of the net amount of plant, property and equipment.

Notwithstanding the provisions of subsection (a) of this Section, the Board may sell, transfer or otherwise dispose of all or substantially all of the System for purposes of consolidating the System with or merging the System into one or more regional systems of which the Board is a participating member jurisdiction or consolidating and merging the sewer system of the Board and the System into one system if: (1) the successor entity assumes in writing all of the Indebtedness then Outstanding, (2) the successor entity covenants in writing to comply with the Rate Covenant, (3) the Board obtains an opinion of Bond Counsel, subject to the customary exceptions and qualifications, substantially to the effect that the assumption by the successor entity of all, of the Indebtedness then Outstanding shall not have an adverse effect on the tax-exempt status of the interest on any such Indebtedness the interest on which was excludable from gross income for purposes of Federal income taxation when issued, (4) an opinion of a Qualified Independent Consultant to the effect that such sale will not, in the current

or any future Fiscal Year, result in Net Revenues not meeting the required Rate Covenant or that Rate Covenant will be less than 100% of the Annual Debt Service on all Indebtedness to be Outstanding after such sale. In reaching its conclusion, the Qualified Independent Consultant shall take into consideration such factors as such Qualified Independent Consultant may deem significant, including (i) anticipated diminution of Net Revenues, (ii) anticipated increases or decreases in Operating Expenses whether or not attributable to such sale, and (iii) reduction in the Annual Debt Service attributable to the application of the sale proceeds to the provision for payment of Indebtedness theretofore Outstanding. Such sale may include a partial interest in a water facility owned or to be owned in whole or in part by the Board. All proceeds of any such sale shall be deposited in the (on a *pro rata* basis if funds are not sufficient to cause the Series Debt Service Reserve Requirement to be fully funded at the Common Debt Service Reserve Requirement or Separate Series Debt Service Reserve Requirement), and then the Water System Fund.

SECTION 9.08. <u>Insurance</u>. The Board shall continuously maintain insurance with recognized responsible commercial insurance companies against such risks and in such amounts as are customary for public bodies owning and operating similar systems, including (a) insurance against loss or damage to the System, (b) public liability insurance against liability for bodily injury, including death resulting therefrom, and for damage to property, including loss of use thereof, arising out of the ownership or operation of the System, and (c) workers' compensation insurance with respect to the System.

In lieu of insurance written by commercial insurance companies, and to the extent allowed by the laws of the State, the Board may maintain a program of self-insurance or participate in group risk financing programs, including sponsored insurance programs, risk pools, risk retention groups, purchasing groups and captive insurance companies, and in state or Federal insurance programs; provided, however, that the Board shall obtain and maintain on file a triannual favorable written opinion of a Qualified Independent Consultant that such alternative is reasonably acceptable with respect to the coverages under all the circumstances.

SECTION 9.09. Damage, Destruction, Condemnation and Loss of Title. If all or any part of the System is destroyed or damaged by fire or other casualty, condemned or lost by failure of title, the Board shall restore promptly the property destroyed or damaged to substantially the same condition as before such destruction, damage; condemnation or loss of title with such alterations and additions as the Board may determine and which will not impair the capacity or character of the System for the purpose for which it is then being used or is intended to be used. The Board shall apply so much as may be necessary of such Net Proceeds received on account of any such destruction, damage, condemnation or loss of title to payment of the cost of such restoration, either on completion or as the work progresses. If such Net Proceeds are not sufficient to pay in full the cost of such restoration, the Board shall pay so much of the cost as may be in excess of such Net Proceeds from any legally available moneys. Any balance of such Net Proceeds remaining after payment of the cost of such restoration shall be deposited in the Debt Service Fund to the extent needed to make any payments with respect to any Indebtedness, otherwise such monies shall be deposited in the Revenue Fund.

SECTION 9.10. Records and Accounts; Inspections and Reports. The Board shall keep proper books of records and accounts, separate from any of its other records and accounts,

showing complete and correct entries of an transactions relating to the System, and the Trustee shall have the right at all reasonable times to inspect the System and all records, accounts and data relating thereto. The Board shall also cause a certified audit of its records and accounts to be made in accordance with generally accepted accounting principles by an independent certified public accountant at the end of each Fiscal Year which shall reflect in reasonable detail the financial condition and results of operation of the System and whether the Board has complied with the Rate Covenant and such report shall be delivered to the Board of Liquidation.

SECTION 9.11. <u>Capital Budget.</u> The Board shall annually adopt a multi-year financial plan for capital expenses encompassing at least the forthcoming 5 fiscal years.

#### ARTICLE X

### **DEFAULTS AND REMEDIES**

SECTION 10.01. Events of Default. Each of the following events shall be an Event of Default:

- (a) Default in the due and punctual payment of the principal of or premium, if any, on any Bond (whether at maturity, call for redemption or otherwise);
  - (b) Default in the due and punctual payment of the interest on any Bond;
- (c) Subject to the remedial provisions of Section 7.01, failure of the Board to observe and perform any of its other covenants, conditions or agreements under this Resolution or in the Bonds for a period of 60 days after written notice either from the Paying Agent or the Board of Liquidation or holders of not less than 25% in aggregate Principal Amount of Bonds then Outstanding (unless the Paying Agent, the Board of Liquidation or the holders agree in writing to an extension of such time prior to its expiration), specifying such failure and requesting that it be remedied, or in the case of any such default that cannot with due diligence be cured within such 60 day period, failure of the Board to proceed promptly to cure the same and thereafter prosecute the curing of such default with due diligence within 60 days thereafter.
- (d) The failure of the Board to make any required payment with respect to any Other Senior Parity Indebtedness, and any period of grace with respect thereto shall have expired, or an event of default as defined in any mortgage, indenture, or instrument under which there may be issued, or by which there may be secured or evidenced any Other Senior Parity Indebtedness, shall occur, which event of default shall not have been waived by the holder of such mortgage, indenture or instrument; provided, however, that such default shall not constitute an Event of Default within the meaning of this Section if within 30 days, or within the time allowed for service of a responsive pleading if any proceeding to enforce payment of the Other Senior Parity Indebtedness is commenced, the Board in good faith shall commence proceedings to contest the obligation to pay or the existence of such Other Senior Parity Indebtedness.
- (e) (1) Commencement by the Board of a voluntary case under the Federal bankruptcy laws, as now or hereafter constituted, or any other applicable Federal or state bankruptcy, insolvency or similar law, (2) consent by the Board to the appointment of a receiver, liquidator, assignee, trustee, custodian, sequestretor or other similar official for the Board, the System or any substantial part of the Board's property, or to the taking possession by any such official of the System or any substantial part of the Board's property, (3) making by the Board of any assignment for the benefit of creditors, or (4) taking corporate action by the Board in furtherance of any of the foregoing;
- (f) The entry of any (1) decree or order for relief by a court having jurisdiction over the Board or its property in an involuntary case under the Federal bankruptcy laws, as now or hereafter constituted, or any other applicable Federal or state bankruptcy, insolvency or other law, (2) appointment of a receiver, liquidator, assignee, trustee, custodian, sequestrator or similar

official for the Board, the System or any substantial part of the Board's property, or (3) order for the termination or liquidation of the Board or its affairs; or

(g) Failure of the Board within 60 days after the commencement of any proceedings against it under the Federal bankruptcy laws, or any other applicable Federal or state bankruptcy, insolvency or similar law, to have such proceedings dismissed or stayed.

SECTION 10.02. Notice to Holders of Senior Debt of Certain Default. If the Board of Liquidation is required to draw moneys from the Debt Service Reserve Fund to pay principal or interest on the Bonds, then the Board of Liquidation shall cause to be posted on EMMA a Material Event Notice as provided in any continuing disclosure agreement designed to comply with Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

SECTION 10.03. Acceleration. Upon the occurrence and continuation of an Event of Default, either the Board of Liquidation (by notice in writing by the Board) or holders of not less than 25% in aggregate Principal Amount of Bonds then Outstanding (by notice in writing to the Board and the Board of Liquidation) may declare the entire unpaid principal of the Bonds due and payable and, thereupon, the entire unpaid principal of the Bonds shall forthwith become due and payable. Upon any such declaration the Board shall forthwith pay to the holders of the Bonds the entire unpaid principal of premium, if any, and accrued interest on the Bonds, but only from Net Revenues and other moneys herein specifically pledged for payments of Bondholders. If at any time after such a declaration and before the entry of a final judgment or decree in any suit, action or proceeding instituted on account of such default or before the completion of the enforcement of any other remedy under this Resolution, the principal of all Bonds that have matured or been called for redemption pursuant to any sinking fund provision and all arrears of interest have been paid and any other Events of Default which may have occurred have been remedied, then the Board of Liquidation may, by written notice to the Board, rescind or annul such declaration and its consequences. No such rescission or annulment shall extend to or affect any subsequent default or impair any right consequent thereon. Subordinate Debt may not be accelerated if any Senior Debt is outstanding.

### SECTION 10.04. Proceedings Brought by the Board of Liquidation

- (a) Whether or not a declaration shall be made by the Board of Liquidation or Bondholders pursuant to Section 10.01, if an Event of Default shall happen and shall not have been remedied, then and in every such case, the Board of Liquidation may proceed to protect and enforce its rights and the rights of the registered owners of the Bonds under this Resolution by a suit or suits in equity or at law, whether for the specific performance of any covenant herein contained, or in aid of the execution of any power herein granted, or for an accounting against the Board as if the Board were the trustee of an express trust, or for the enforcement of any other legal or equitable right as the Board of Liquidation, being advised by counsel, shall deem most effectual to enforce any of its rights or to perform any of its duties under this Resolution.
- (b) Upon the occurrence of an Event of Default, by suit, action or proceedings in any court of competent jurisdiction, the Board of Liquidation shall be entitled to obtain the appointment of a receiver of the moneys, securities and funds then held by the Board in any fund or account under this Resolution and of the Revenues and the whole or any part of the System,

with all such powers as the court making such appointment shall confer. Such receiver may take possession of the System, operate and maintain it, and collect and receive the Revenues in the same manner as the Board itself might do, including, if necessary, the use of a lock box, and shall apply the same in accordance with the obligations of the Board. Notwithstanding the appointment of any receiver, the Board of Liquidation shall be entitled to retain possession and control of and to collect and receive income from, any moneys, securities and funds deposited or pledged with it under the resolution or agreed or provided to be delivered to or deposited or pledged with it under this Resolution.

- (c) All rights of action under this Resolution may be enforced by the Board of Liquidation without the possession of any of the Bonds or the production thereof on the trial or other proceedings.
- (d) The registered owners of a majority in Principal Amount of the Bonds Outstanding may direct the time, method and place of conducting any proceeding for any remedy available to the Board of Liquidation, provided that the Board of Liquidation shall have the right to decline to follow any such direction if the Board of Liquidation shall be advised by counsel that the action or proceeding so directed may not lawfully be taken, or if the Board of Liquidation in good faith shall determine that the action or proceeding so directed would involve the Board of Liquidation in personal liability or be unjustly prejudicial to the Bondholders not parties to such direction. The Board may only follow directions from the holders of Subordinate Debt if no Senior Debt is outstanding.
- (e) Regardless of the happening of an Event of Default, the Board of Liquidation shall have power to, but unless requested in writing by the registered owners of a majority in Principal Amount of the Bonds then Outstanding and furnished with reasonable security and indemnity, shall be under no obligation to, institute and maintain such suits and proceedings as it may deem necessary or expedient to prevent any impairment of the security under this Resolution by any acts which may be unlawful or in violation of this Resolution, or necessary or expedient to preserve of protect its interests and the interests of the Bondholders.
- (f) No remedy conferred by this Resolution upon or reserved to the Board of Liquidation and Bondholders is intended to be exclusive of any other remedy, but each such remedy shall be cumulative and shall be in addition to any other remedy given to the Board of Liquidation and holders of Bonds hereunder or now or hereafter existing at law, in equity or by statute.

No delay or omission to exercise any right or power accruing upon any default or Event of Default shalt impair any such right or power or shall be construed to be a waiver of any such default or Event of Default or acquiescence therein, and every such right and power may be exercised from time to time and as often as may be deemed expedient.

No waiver of any default or Event of Default hereunder by the Board of Liquidation or Bondholders shall extend to or shall affect any subsequent default or Event of Default or shall impair any rights or remedies consequent thereon.

SECTION 10.05. Right of Bondholders to Direct Proceedings. Anything in this Resolution to the contrary notwithstanding, the holders of a majority in aggregate Principal Amount of Bonds then Outstanding shall have the right, at any time, by an instrument or instruments in writing executed and delivered to the Board of Liquidation, to direct the method and place of conducting all proceedings to be taken in connection with the enforcement of the terms and conditions of this Resolution or any other proceedings hereunder, provided, however, that such direction shall not be otherwise than in accordance with the provisions of law and of this Resolution.

No registered owner of any Bond shall have any right to institute any suit, action or proceeding at law or in equity for the enforcement of any provision of this Resolution or for any remedy under this Resolution, unless such registered owner shall have previously given to the Board of Liquidation written notice of the happening of any Event of Default and the registered owners of at least twenty-five percent (25%) in Principal Amount of Bonds then Outstanding shall have filed a written request with the Board of Liquidation, and shall have offered it reasonable opportunity, to exercise the powers granted in this Article in its own name, and unless such registered owners shall have offered to the Board of Liquidation adequate security and indemnity against the costs, expenses and liabilities to be incurred thereby, and the Board of Liquidation shall have refused to comply with such request within a reasonable time.

Nothing in this Resolution shall affect or impair the obligation of the Board to pay on the respective dates of maturity thereof the Principal Amount of and interest on the Bonds, or affect or impair the right of action of any registered owner to enforce the payment of his Bond.

SECTION 10.06. <u>Application of Moneys</u>. All moneys received by the Board of Liquidation pursuant to any right given or action taken under the provisions of this Article shall, after payment of the cost and expenses of the proceedings resulting in the collection of such moneys, the expenses, liabilities and advances incurred or made by the Board of Liquidation and the fees and the expenses of the Board of Liquidation in carrying out this Resolution, be deposited in the Debt Service Fund and applied as follows and for no other purpose:

(a) Unless the principal of all of Bonds shall have become due or shall have been declared due and payable, all such moneys shall be applied:

First – To the payment to the persons entitled thereto of all installments of interest then due on the Senior Debt, in the order of the maturity of the installments of such interest and, if the amount available shall not be sufficient to pay in fill any particular installment, then to the payment ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference except as to any difference in the respective rates of interest specified in the Senior Debt; and

Second – To the payment to the persons entitled thereto of the unpaid principal of and premium, if any, on any of the Senior Debt which shall have become due (other than Senior Debt called for redemption for the payment of which moneys are held pursuant to the provisions of this Resolution), in the order of their due dates, and, if the amount available shall not be sufficient to pay in full Senior Debt due on any particular date, and then to the payment of such principal and premium, if any, ratably, according to the

amount of such principal due on such date, to the persons entitled thereto, without any discrimination or preference.

- (b) If the principal of all the Bonds shall have become due or shall have been declared due and payable, all such moneys shall be applied to the payment of the principal and interest then due and unpaid on the Senior Debt, including, to the extent permitted by law, interest on overdue installments of interest, without preference or priority of principal over interest or of interest over principal, or of any installment of interest over any other installment of interest, or of any Senior Debt over any other Senior Debt, ratably, according to the amounts due respectively for principal and interest, to the persons entitled thereto, without any discrimination or preference except as to any difference in the respective rates of interest specified in the Senior Debt.
- (c) If the principal of all the Bonds shall have been declared due and payable and if such declaration shall thereafter have been rescinded and annulled under the provisions of this Article, then, subject to the provisions of subsection (b) of this Section in the event that the principal of all the Senior Debt shall later become due or be declared due and payable, the moneys shall be applied in accordance with the provisions of subsection (a) of this Section.

Whenever moneys are to be applied pursuant to the provisions of this Section, such moneys shall be applied at such times and from time to time as the Board of Liquidation shall determine, having due regard to the amount of such moneys available for application and the likelihood of additional moneys becoming available for such application in the future. Whenever the Board of Liquidation shall apply such moneys, it shall fix the date (which shall be an interest payment date unless it shall dean another date more suitable) on which such application is to be made and on such date interest on the amounts of principal to be paid and on such dates shall cease to accrue. The Board of Liquidation shall give such notice as it may deem appropriate of the deposit with it of any such moneys and of the fixing of any such date.

Whenever there are moneys remaining after application to the Debt Service Fund for the payment of Senior Debt, the Board of Liquidation shall apply such remaining moneys, allocated in a similar manner as provided above, to the payment of Subordinate Debt and thereafter to the CEA GO Zone Indebtedness and the DPW Payments.

Whenever the principal of and premium, if any, and interest on all Indebtedness have been paid under the provisions of this Section, all payments required by the terms of any. Supplemental Resolution have been paid and all expenses and charges of the Board of Liquidation have been paid, any balance remaining in the several funds created by this Resolution shall be paid to the Board as provided in Section 7.10.

SECTION 10.07. Remedies Vested in Board of Liquidation. All rights of action (including the right to file proof of claims) under this Resolution or under any of the Bonds may be enforced by the Board of Liquidation without the possession of any of the Bonds or the production thereof in any trial or other proceeding relating thereto and any such suit or proceeding instituted by the Board of Liquidation may be brought in its name without the necessity of joining as plaintiffs or defendants any Bondholders, and any recovery of judgment shall be for the equal benefit of the Bondholders.

SECTION 10.08. <u>Limitation on Suits.</u> Except to enforce the rights given under Sections 10.04 and 10.05, no Bondholder shall have any right to institute any action, suit or proceeding at law or in equity for the enforcement of this Resolution or for the execution of any trust thereof or any other remedy hereunder, unless (a) a default has occurred and is continuing of which the Board of Liquidation has been notified as provided in Section 10.03, or of which by such Section it is deemed to have notice, (b) such default has become an Event of Default and the holders of 25% in aggregate Principal Amount of Bonds then Outstanding have made written request to the Board of Liquidation and offered it reasonable opportunity either to proceed to exercise the powers hereinbefore granted or to institute such action, suit or proceeding in its own name, (c) such requesting Bondholders have offered to the Board of Liquidation indemnity as provided herein, (d) the Board of Liquidation has thereafter failed or refused to exercise the powers hereinbefore granted, or to institute such action, suit or proceeding in its, own name, (e) no direction inconsistent with such written request has been given to the Board of Liquidation by the holders of a majority in aggregate Principal Amount of Bonds then Outstanding, and (f) notice of such action, suit or proceeding is given to the Board of Liquidation; it being understood and intended that no one or more holders of the Bonds shall have any right in any manner whatsoever to. affect, disturb or prejudice this Resolution by its or their action or to enforce any rights hereunder except in the manner herein provided, and that all proceedings at law or in equity shall be instituted and maintained in the manner herein provided and for the equal benefit of the holders of all Bonds then Outstanding. The notification, request and offer of indemnity set forth above, at the option of the Board of Liquidation, shall be conditions precedent to the execution of the powers and trusts of this Resolution and to any action or cause of action for the enforcement of this Resolution or for any other remedy hereunder.

SECTION 10.09. <u>Termination of Proceedings</u>. In case the Board of Liquidation shall have proceeded to enforce any right under this Resolution and such proceedings shall have been discontinued or abandoned for any reason or shall have been determined adversely to the Board of Liquidation, then and in every such case the Board and the Board of Liquidation shall be restored to their former positions and rights hereunder, and all rights, remedies and powers of the Board of Liquidation shall continue as if no such proceedings had been taken.

SECTION 10.10. Waivers of Events of Default. The Board of Liquidation may in its discretion waive any Event of Default hereunder or any action taken pursuant to any Event of Default and rescind any acceleration of maturity of principal of and interest on the Bonds, and shall do so at the request of the holders of (a) a Majority in aggregate Principal Amount of Bonds then Outstanding in respect of which default in the payment of principal and/or premium, if any, and/or interest exists, or (b) a majority in aggregate Principal Amount of Bonds then Outstanding in the case of any other default; provided, however, that

- (a) there shall not be waived without the consent of the holders of all Bonds then Outstanding (A) any Event of Default in the payment of the principal of any Outstanding Bonds (whether at maturity or by sinking fund redemption), or (B) any default in the payment when due of the interest on any such Bonds unless, prior to such waiver or rescission,
  - (i) there shall have been paid or provided for all arrears of interest with interest, to the extent permitted by law, at the rate borne by the Bonds on overdue installments of interest, all arrears of principal and premium, if any, and all expenses of the Board of Liquidation in connection with such default, and
  - (ii) in case of any such waiver or rescission or in the case of any discontinuance, abandonment or adverse determination of any proceeding taken by the Board of Liquidation on account of any such default, the Board, the Board of Liquidation, and the holders of Bonds shall be restored to their former positions and rights hereunder respectively; and
- (b) no acceleration of maturity under Section 10.03 made at the request of the holders of 25% in aggregate Principal Amount of Bonds then Outstanding shall be rescinded unless requested by the holders of at least 25% in aggregate Principal Amount of Bonds then Outstanding.
- (c) any such waiver and/or rescission shall only be effective with respect to the Bonds if the holders of Other Senior Parity Indebtedness shall have waived any event of default related to such Other Senior Parity Indebtedness or any action taken pursuant to such event of default and/or rescinded any declaration of maturity of principal of and interest on the Other Senior Parity Indebtedness.

No such waiver or rescission relating to the Bonds shall extend to any subsequent or other default or impair any right consequent thereon.

SECTION 10.11. <u>Unconditional Right to Receive Principal, Premium and Interest.</u>
Nothing in this Resolution shall, however, affect or impair the right of the Board of Liquidation or any Bondholder to enforce, by action at law, payment of the principal of, premium, if any, or interest on any Bond at and after the maturity thereof, or on the date fixed for redemption or upon the same being declared due prior to maturity as herein provided, or the obligation of the Board to pay the principal of, premium, if any, and interest on each of the Bonds issued hereunder to the respective holders thereof at the time and place, from the source and in the manner herein and in the Bonds expressed.

# **ARTICLE XI**

### SUPPLEMENTAL RESOLUTIONS

SECTION 11.01. <u>Supplemental Resolutions Not Requiring Consent of Holders of Bonds.</u> The Board may at any time and from time to time, adopt a resolution supplementing the Resolution for any one or more of the following purposes, which resolution, upon the approval by and the filing with the Board of Liquidation in accordance with Section 11.03 of a copy thereof certified by an Authorized Officer of the Board, shall be fully effective in accordance with its terms:

- (a) To cure any ambiguity, formal defect or omission in this Resolution;
- (b) To grant to or confer upon the Bondholders any additional rights, remedies, powers or authority that may lawfully be granted to or conferred on the Bondholders;
- (c) To add to the covenants and agreements of the Board in this Resolution other covenants and agreements to be observed by the Board;
- (d) To modify, amend or supplement this Resolution in such manner as required to permit the Board to comply with the provisions of the Code relating to the rebate to the United States of America of earnings derived from the investment of the proceeds of Bonds, provided that such modification, amendment or supplement does not materially adversely affect the holders of all Outstanding Bonds;
- (e) To modify, amend or supplement this Resolution in such manner as may be required by a Rating Agency to maintain or enhance its rating on the Senior Debt, provided that such modification, amendment or supplement does not materially adversely affect the holders of all Outstanding Bonds;
- (f) To modify, amend or supplement this Resolution to implement any covenants or agreements contemplated by Section 9.04;
- (g) To authorize the issuance of and to secure one or more issues of Indebtedness pursuant to Article IV;
- (h) To amend any agreement with a securities depository relating to a book-entry system to be maintained with respect to any Bonds; and
- (i) To modify, amend or supplement this Resolution in any manner that the Trustee concludes is not materially adverse to the holders of all Outstanding Bonds.

SECTION 11.02. <u>Supplemental Resolutions Requiring Consent of Bondholders.</u> Exclusive of Supplemental Resolutions authorized by Section 11.01 and subject to the terms and provisions contained in this Section, the holders of not less than a majority in aggregate Principal Amount of Outstanding Bonds shall have the right from time to time, notwithstanding anything in this Resolution to the contrary, to consent to the adoption by the Board of such other resolution or resolutions supplemental hereto as shall be deemed necessary or desirable by the Water GBR Final

Board for the purpose of modifying, altering, amending, adding to or rescinding, in any particular, any of the terms or provisions contained in this Resolution and any Supplemental Resolutions; provided, however, that nothing in this Resolution shall permit, or be construed as permitting, (a) an extension of the maturity of the principal of or the interest on any Bonds, (b) a privilege or priority of any Senior Debt over any other Senior Debt, (c) a reduction in the aggregate Principal Amount of Bonds required for consent to such Supplemental Resolutions, (d) a reduction in the Principal Amount of or premium, if any, on any Bonds or the rate of interest thereon, or (e) an extension of time or a reduction in amount of any payment required by any sinking fund that may be applicable to any Bonds, without the consent of the holders of all of the Outstanding Bonds; provided, however that there shall be no modification of the Net Revenue pledge which secures the Other Senior Parity Indebtedness nor of the Net Revenue pledge which secures the Subordinate Debt, if such respective modification would adversely affect the interests of the holders of such debt.

If at any time the Board determine to adopt a Supplemental Resolution as described in this Section 11.02, the Board of Liquidation shall cause notice of the proposed adoption of such Supplemental Resolution to be sent by registered or certified mail to the registered owner of each Bond at his address as it appears on the registration books. Such notice shall briefly set forth the nature of the proposed Supplemental Resolution and shall state that a copy thereof is on file at the corporate trust office of the Trustee for inspection by all Bondholders. If within 90 days or such longer period as shall be prescribed by the Board following the giving of such notice, the holders of not less than a majority in aggregate Principal Amount of Outstanding Bonds, or in the case of (a) through (e) above, the holders of all Outstanding Bonds, shall have consented to and approved the execution thereof as herein provided, no holder of any Bond shall have any right to object to any of the terms and provisions contained therein, or the operation hereof, or in any manner to question the propriety thereof, or to enjoin or restrain the Board from adopting such Supplemental Resolution or from taking any action pursuant to the provisions thereof. Upon the adoption of any such Supplemental Resolution as in this Section permitted and provided, this Resolution shall be and be deemed to be modified and amended in accordance therewith.

Bonds owned or held by or for the account of the Board shall not be deemed Outstanding for the purpose of consent or any calculation of Outstanding Bonds provided for in this Resolution. At the time of any such calculation, the Board shall furnish the Board of Liquidation a certificate of an Authorized Officer of the Board upon which the Board of Liquidation may rely, describing all Bonds so to be excluded.

Notwithstanding anything in this Resolution to the contrary; the Board may enter into any Supplemental Resolution upon receipt of the consent of the holders of all Outstanding Bonds.

SECTION 11.03. Adoption and Filing of Supplemental Resolutions. Any resolution of the Board referred to and permitted or authorized by this Article XI may be adopted by the Board without the consent of any of the Bondholders, but shall become effective only on the conditions to the extent and at the time provided in this Article. Every such resolution so becoming effective shall thereupon form a part of the Resolution. Any such resolution when filed with the Board of Liquidation shall be accompanied by a Counsel's Opinion to the effect that such Resolution has been duly and lawfully adopted by the Board, in accordance with the provisions of the

esolutions, is authorized or permitted by the Resolution, and constitutes the lawful and bligation of the Board in accordance with its terms.	oinding

### **ARTICLE XII**

### TRUSTEE; PAYING AGENT

# SECTION 12.01. Trustee.

- (a) Upon the occurring of (i) the Board of Liquidation's refusal to accept its fiduciary duties hereunder, or (ii) the abolishment of the Board of Liquidation without the establishment of a successor in function, a Trustee shall be appointed in the Supplemental Resolution adopted by the Board and said Trustee shall thereafter assume the duties of the Board hereunder.
- (b) The Trustee shall be a bank or trust company organized under the laws of the State, or a national banking association doing business in Louisiana, having a capital and surplus aggregating at least fifty million dollars (\$50,000,000), if there be such a bank or trust company or national banking association willing and able to accept the office on reasonable and customary terms and authorized by law to perform all duties imposed upon it by the Resolution.

# SECTION 12.02. Paying Agent.

- (a) The Paying Agent for the Bonds of any Series authorized by the Resolution shall be the Paying Agent selected by the Board of Liquidation to serve as its Paying Agent. Each Paying Agent shall be a bank or trust company or national banking association having a capital and surplus aggregating at least fifty million dollars (\$50,000,000), if there be such a bank or trust company or national banking association willing and able to accept the office on reasonable and customary terms and authorized by law to perform all the duties imposed upon it by the Resolution. Each Paying Agent shall signify its acceptance of the duties and obligations imposed upon it by the Resolution by executing and delivering to the Board of Liquidation a written acceptance thereof.
- (b) In addition to the other obligations imposed on the Paying Agent hereunder, or under the applicable Supplemental Resolution, the Paying Agent shall agree with respect to its related Series of Bonds to:
  - (i) hold all Bonds delivered to it for purchase trust for the benefit of the registered owners thereof until moneys representing the purchase price of such Bonds shall have been delivered to or for the account of or to the order of such Bondholders;
  - (ii) hold all moneys representing the purchase price of Bonds in trust for the benefit of the persons entitled to receive the payment of such purchase price;
  - (iii) keep such books and records as shall be consistent with prudent industry practice and make such books and records available for inspection by the Board and the Board of Liquidation at all reasonable times;
    - (iv) maintain the Register and transfer and exchange Bonds; and
  - (v) deliver to the Board and the Board of Liquidation upon request a list of the names and addresses of the registered owners of the Bonds.

- (c) If at any time the Paying Agent is unable or unwilling to act as Paying Agent, the Paying Agent may resign, upon 30 days' prior written notice to the Board and the Board of Liquidation. Such resignation shall become effective upon the date specified in such notice, unless a successor Paying Agent have not been appointed, in which case such resignation shall become effective upon the appointment of such successor. The Paying Agent may be removed at any time by the Board of Liquidation by written notice signed by the Board of Liquidation delivered to the Board, each Bondholder and the Paying Agent. The Board of Liquidation shall promptly certify to the Board that it has mailed such notice and such certificate will be conclusive evidence that such notice was given in the manner required hereby. Upon resignation or removal of the Paying Agent, the Board of Liquidation shall appoint a successor Paying Agent which is a bank or trust company which, meets the requirements of subsection (a) above. The Board of Liquidation shall notify each Bondholder of the related Series of Bonds of the appointment of such successor. Upon the resignation or removal of the Paying Agent, the Paying Agent shall pay over, assign and deliver any moneys and Bonds held by it in trust pursuant to this Section 12.02 to its successor.
- (d) The Board may appoint in the applicable Supplemental Resolution a Co-Paying Agent for the Bonds of any Series for purposes of paying the principal on such Bonds or effecting transfers and exchanges, subject to the provisions above and those set forth in the applicable Supplemental Resolution.

SECTION 12.03. <u>Trustee Acceptance of Trusts and Obligations.</u> The following provisions are applicable only if a Trustee shall be appointed hereunder.

Any Trustee so appointed hereunder shall, in writing, accept the trusts and obligations imposed upon it by this Resolution and agrees to perform such trusts and obligations, but only upon and subject to the following express terms and conditions and no implied covenants or obligations shall be read into this Resolution against the Trustee:

- (a) The Trustee, prior to the occurrence of as Event of Default and after the curing of all Events of Default which may have occurred, undertakes to perform such duties and only such duties as are specifically set forth in this Resolution. Upon the occurrence and continuation 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 this Resolution and use the same degree of care and skill in its exercise as a prudent man ordinarily would exercise and use under the circumstances in the conduct of his own affairs.
- (b) The Trustee may execute any of the trusts or powers hereof and perform any of its duties by or through attorneys, agents, receivers or employees but shall be answerable for the conduct of the same in accordance with the standard specified above, and shall be entitled to act upon the opinion or advice of its counsel concerting all matters of trust hereof and the duties hereunder, and may in all cases pay reasonable compensation to all such attorneys, agents, receivers and employees as may reasonably be employed in connection with the trust hereof. The Trustee may act on a Counsel's Opinion and shall not be responsible for any loss or damage resulting from any action or nonaction by it taken or omitted to be taken in good faith and in reliance on such Counsel's Opinion.

- (c) The Trustee shall not be responsible for any recital herein or in the Bonds (except in respect to the certificate of the Trustee endorsed on the Bonds) or for the recording, rerecording, filing or re-filing of any financing or continuation statement or any other document or instrument, or for insuring the System, collecting any insurance moneys, or for the validity of the execution by the Board of this Resolution or for any supplements thereto or instruments of further assurance, or for the sufficiency of the security for the Bonds issued hereunder or intended to be secured hereby, and the Trustee shall not be bound to ascertain or inquire as to the observance or performance of any covenants, conditions or agreements on the part of the Board except as hereinafter set forth. The Trustee shall not be responsible or liable for any loss suffered in connection with any investment of moneys made by it in accordance with Section 8.02.
- (d) The Trustee shall not be accountable for the use of any Bonds authenticated or delivered hereunder. The bank or trust company acting as Trustee and its directors, officers, employees or agents may in good faith buy, sell, own, hold and deal in the Bonds and may join in any action which any holder of Bonds may be entitled to take with like effect as if such bank or trust company were not the Trustee. To the extent permitted by law, such bank or trust company may also receive tenders and purchase in good faith Bonds from itself including any department, affiliate or subsidiary, with like effect as if it were not the Trustee.
- (e) The Trustee shall be protected in acting on any notice, request, consent, certificate, order, affidavit, letter, telegram or other paper or document reasonably believed by it to be genuine and correct and to have been signed or sent by the proper person or persons. Any action taken by the Trustee pursuant to this Resolution on the request or authority or consent of any person who at the time or making such request or giving such authority or consent is the owner of any Bonds shall be conclusive and binding upon all future owners of the same Bonds and upon Bonds issued in exchange therefor or in place thereof.
- (f) As to the existence or non-existence of any fact or as to the sufficiency or validity of any instrument, paper or proceeding, the Trustee shall be entitled to rely on a certificate signed on behalf of the Board by an Authorized Officer, or such other person or persons as may be designated for such purposes by resolution of the Board, as sufficient evidence of the facts therein contained, and prior to the occurrence of a default of which the Trustee has been notified as provided in subsection (h) of this Section, or of which by said subsection it is deemed to have notice, may also accept a similar certificate to the effect that any particular dealing, transaction or action is necessary or expedient, but may at its discretion secure such further evidence deemed necessary or advisable, but shall in no case be bound to secure the same. The Trustee may accept a certificate of an Authorized of the Board to the effect that a resolution in the form therein set forth has been adopted by the Board as conclusive evidence that such resolution has been duly adopted and is in full force and effect.
- (g) The permissive right of the Trustee to do things enumerated in this Resolution shall not be construed as a duty, and the Trustee shall not be answerable for other than its negligence or willful default.
- (h) The Trustee shall not be required to take notice or be deemed to have notice of any default hereunder, except failure by the Board to cause to be made any of the payments to the Trustee required to be made by Article VII or failure by the Board to file with the Trustee

any document required by this Resolution to be so filed, unless the Trustee shall be notified of such default by the Board or by the holders of 25% in aggregate Principal Amount of Bonds then outstanding.

- (i) At any and all reasonable times the Trustee and its duly authorized agents, attorneys, experts, engineers, accountants and representatives shall have the right, but shall not be required, to inspect the System and all books, papers and records of the Board pertaining to the System and the Bonds, and to make such memoranda from and in regard thereto as may be desired.
- (j) The Trustee shall not be required to give any bond or surety with respect to the execution of its rights and obligations hereunder.
- (k) Notwithstanding any other provision of this Resolution, the Trustee shall have the right, but shall not be required, to demand, as a condition of any action by the Trustee in respect of the authentication of any Bonds, the withdrawal of any cash, the release of any property, or any action whatsoever within the purview of this Resolution, any showings, certificates, opinions, appraisals or other information, or corporate action or evidence thereof; in addition to that required by the terms hereof.
- (l) Before taking any action under this Resolution the Trustee may require that satisfactory indemnity be furnished to it for the reimbursement of all expenses to which it may be put and to protect it against all liability by reason of any action so taken, except liability which is adjudicated to have resulted from its negligence or willful default
- (m) All moneys received by the Trustee shall, until used or applied or invested as herein provided, be held in trust in the manner and for the purposes for which they were received but need not be segregated from other moneys except to the extent required by this Resolution or law. The Trustee shall not be under any liability for interest on any moneys received hereunder except such as may be agreed upon.

SECTION 12.04. <u>Fees, Charges and Expense of Trustee.</u> The Trustee shall be entitled to payment of and reimbursement for reasonable fees for its services and all expenses reasonably incurred by it hereunder, including the reasonable fees and disbursements of its counsel.

SECTION 12.05. <u>Notice Required of Trustee</u>. If the Board or the Board of Liquidation shall fail to collect and deposit Net Revenues to the Debt Service Fund and Debt Service Reserve Fund as provided in Article VII, the Trustee shall give notice thereof by telephone or telegram to the Board on the next succeeding Business Day and shall confirm such notice in writing by first class registered or certified mail. In the event of (a) the continuance for 30 days of any such failure to make payment, or (b) notification to the Trustee by the holders of 25% in aggregate Principal Amount of the Bonds then Outstanding of any default hereunder, then the Trustee shall give notice thereof to the Bondholders then Outstanding.

SECTION 12.06. <u>Intervention by Trustee</u>. In any judicial proceeding to which the Board is a party and which in the opinion of the Trustee has a substantial bearing on the interests of the Bondholders, the Trustee may intervene on behalf of the Bondholders and, subject to Section

12.03(1), shall do so if requested by the holders of 25% in aggregate Principal Amount of Bonds then outstanding.

SECTION 12.07. Merger or Consolidation of Trustee. Any corporation or association into which the Trustee may be converted or merged, or with which it may be consolidated, or to which it may sell or transfer its corporate trust business and assets as a whole or substantially as a whole, or any corporation or association resulting from any such conversion, sale, merger, consolidation or transfer to which it is a party shall be and become successor Trustee hereunder and vested with all the trusts, powers, discretion, immunities, privileges and all other matters as was its predecessor, without the execution or filing of any instrument or any further act, deed or conveyance on the part of any of the parties hereto, provided, however, that so long as no Event of Default has occurred and is continuing, the Board shall have the right to appoint a successor Trustee other than corporation or association that results from such conversion, sale, merger, consolidation or transfer.

SECTION 12.08. <u>Resignation by Trustee</u>. The Trustee may at any time resign from the trusts hereby created by giving 30 days' notice to the Board of Liquidation, provided that such resignation shall not take effect until the appointment of a successor or temporary Trustee by the Bondholders, the Board of Liquidation or a court of competent jurisdiction.

SECTION 12.09. Removal of Trustee. The Trustee may be removed at any time (a) by an instrument or concurrent instruments in writing delivered to the Trustee and the Board of Liquidation, and signed by the owners of a majority in aggregate Principal Amount of Bonds then Outstanding, or (b) by the Board of Liquidation by notice in writing given by an Authorized Officer of the Board of Liquidation to the Trustee 30 days before the removal date; provided, however, that the Board shall have no right to remove the Trustee during any time when an Event of Default has occurred or is continuing or when an event has occurred and is continuing or condition exists that with the giving of notice or the passage of time, or both, would be an Event of Default. The removed Trustee shall return to the Board of Liquidation the amount of the Trustee's annual fee allocable to the portion of the current year remaining after the removal date. Notwithstanding the foregoing, nothing contained in this Resolution shall relieve the Board of Liquidation of its obligation to pay the Trustee's fees and expenses incurred to the date of such removal. Such removal shall take effect upon the appointment of a successor Trustee or the earlier appointment of a temporary Trustee by the Bondholders, the Board of Liquidation or a court of competent jurisdiction.

SECTION 12.10. Appointment of Successor Trustee by Bondholders; Temporary Trustee. In case the Trustee hereunder shall resign, be removed, be dissolved, be in course of dissolution or liquidation or otherwise become incapable of acting hereunder, or in case it shall be taken under the control of any public officer or officers or of a receiver appointed by a court, a successor may be appointed by the owners of a majority in aggregate Principal Amount of Bonds then outstanding, by an instrument or concurrent instruments in writing signed by such owners; provided, however, that in case of such vacancy the Board, by an instrument signed by an Authorized Officer, may appoint a temporary Trustee to fill such vacancy until a successor Trustee shall be appointed by the bondholders in the manner provided above; and any such temporary Trustee so appointed by the Board shall immediately and without further act be superseded by the Trustee so appointed by such bondholders. Every such Trustee appointed

pursuant to this section shall be, if there be such an institution willing, qualified and able to accept the trust upon reasonable or customary terms, a bank or trust company having a combined capital, surplus and undivided profits of not less than \$50,000,000.

SECTION 12.11. Concerning any Successor Trustee. Every successor Trustee appointed hereunder shall execute, acknowledge and deliver to its predecessor and also to the Board an instrument in writing accepting such appointment hereunder, and thereupon such successor, without any further act, deed of conveyance, shall become fully vested with all the properties, rights, powers, trusts, duties and obligations of its predecessor; but such predecessor shall, nevertheless, on the request of the Board, execute and deliver an instrument transferring to such successor Trustee all the properties, rights, powers and trusts of such predecessor hereunder, and every predecessor Trustee shall deliver all securities and moneys held by it as Trustee hereunder to its successor. Should any instrument in writing from the Board be required by any successor Trustee for more fully and certainly vesting in such successor the properties, rights, powers and duties hereby vested or intended to be vested in the predecessor, any and all such instruments in writing shall, on request, be executed, acknowledged and delivered by the Board.

SECTION 12.12. <u>Trustee Protected in Relying on Resolutions</u>, etc. The resolutions, opinions, certificates and other instruments provided for in this Resolution may be accepted by the Trustee as conclusive evidence of the facts and conclusions stated therein and shall be full warrant, protection and authority to the Trustee for the release of property and the withdrawal of cash hereunder or the taking of any other action by the Trustee as provided hereunder.

SECTION 12.13. <u>Successor Trustee as Custodian of Funds.</u> In the event of a change in the office of Trustee, the predecessor Trustee which has resigned or been removed shall cease to be custodian of the funds created hereunder, and the successor Trustee shall become such custodian.

#### ARTICLE XIII

### DISCHARGE OF RESOLUTION

SECTION 13.01. Discharge of Resolution. If (a) (1) all Bonds and Subordinate Debt issued hereunder shall have become due and payable in accordance with their terms or otherwise as provided in this Resolution or have been duly called for redemption or irrevocable instructions to call the Bonds or Subordinate Debt issued hereunder to pay them at maturity have been given by the Board of Liquidation to an escrow trustee meeting the requirements of Trustee (the "Escrow Trustee"), and (2) the Escrow Trustee holds for such purpose noncallable Government Obligations or other securities legally sufficient to defease Bonds pursuant to Chapter 14 of Title 39 of the Louisiana Revised Statutes of 1950, as amended, the principal of and the interest on which, as verified by a licensed independent certified public accountant reasonably acceptable to the Escrow Trustee and the Board of Liquidation, at maturity will be sufficient (without reinvestment) (A) to redeem in accordance with the relevant Section hereof or of the Supplemental Resolution all Bonds or Subordinate Debt issued hereunder that have been called for redemption, or for which irrevocable instructions for call for redemption have been given, on the date set for such redemption, (B) to pay at maturity all Bonds or Subordinate Debt issued hereunder not irrevocably called for redemption, (C) to pay interest accruing on all Bonds or Subordinate Debt issued hereunder prior to its redemption or payment at maturity, (D) to make all payments required by the terms of any Supplemental Resolution, and (E) to pay the fees and expenses of any Fiduciary and any other fees and expenses for which the Board is responsible under this Resolution, including the costs and expenses of canceling and discharging this Resolution, and (b) the Escrow Trustee shall have received notification from the holders of all other Indebtedness that such Indebtedness has been paid, or payment has been provided for such Indebtedness, in accordance with the documents related thereto, then the Board of Liquidation shall, at the expense of the Board, cancel and discharge this Resolution and execute and deliver to the Board such instruments in writing as shall be necessary to cancel the lien hereof, and assign and deliver to the Board any property at the time subject to this Resolution that may then be in its possession, except moneys or securities in which such moneys are invested which are held by the Escrow Trustee for the payment of principal, or premium, if any, or interest on the Bonds and Subordinate Debt issued hereunder.

Bonds for the payment or redemption of which cash or noncallable Government Obligations or other securities legally sufficient to defease Bonds pursuant to Chapter 14 of Title 39 of the Louisiana Revised Statutes of 1950, as amended, the principal of and premium, if any, and interest on which will be sufficient therefor, as determined by the Escrow Trustee in reliance on a report of a licensed independent certified public accountant, shall have been deposited with the Escrow Trustee (whether upon or prior to the date of their maturity or their redemption date) shall be deemed to be paid and no longer Outstanding; provided, however, that if such Bonds are to be redeemed prior to the maturity thereof, notice of such redemption shall have been duly given or arrangements satisfactory to the Escrow Trustee shall have been made for the giving thereof.

For purposes of determining whether any Outstanding Variable Rate Indebtedness is deemed paid and discharged pursuant to this Article XIII, such Variable Rate Indebtedness shall

be deemed to bear interest at the maximum rate of interest such Variable Rate Indebtedness may bear pursuant to the applicable Supplemental Resolution.

This Resolution may be discharged in full even if the CEA GO Zone Indebtedness or DPW Payments have not been paid in full.

#### ARTICLE XIV

### **MISCELLANEOUS**

SECTION 14.01. Consents, etc., of Bondholders. Any consent, request, direction, approval, objection or other instrument (collectively, a "Consent") required by this Resolution to be executed by the Bondholders may be in any number of concurrent writings of similar tenor and may be executed by such Bondholders in person or by agent appointed in writing. Proof of the execution of a Consent or of the writing appointing any such agent shall be sufficient for any of the purposes of this Resolution and shall be conclusive in favor of the Board with regard to any action taken under the Consent if the fact and date of the execution by any person of any such writing is proved by a certificate of any officer in any jurisdiction who by law has power to take acknowledgments within such jurisdiction that the person signing such writing acknowledged before him the execution thereof; or by affidavit of any witness to such execution.

SECTION 14.02. <u>Limitation of Rights</u>. With the exception of rights herein expressly conferred, nothing expressed of mentioned in or to be implied from this Resolution Or the Bonds is intended or shall be construed to give to any person other than the parties hereto and the holders of the Bonds any legal or equitable right, remedy or claim, under or in respect to this Resolution or any covenants, conditions and agreements herein contained since this Resolution and all of the covenants, conditions and agreements hereof are intended to be and is for the sole and exclusive benefit of the parties hereto and the holders of the Bonds as herein provided.

SECTION 14.03. <u>Limitation of Liability of Members of the Board</u>, etc. No covenant, agreement or obligation contained herein shall be deemed to be a covenant, agreement or obligation of any present or future member of the Board or officer; employee or agent of the Board in his or her individual capacity, and neither the members of the Board nor any officer of the Board executing the Bonds shall be liable personally on the Bonds or be subject to any personal liability or accountability by reason of the issuance thereof. No member of the Board or officer, employee, agent or advisor of the Board shall incur any personal liability with respect to any other action taken by him pursuant to this Resolution, provided such member, officer, employee, agent or advisor acts in good faith.

SECTION 14.04. <u>Severability</u>. If any provision of this Resolution shall be held invalid by any court of competent jurisdiction, such holding shall not invalidate any other provision hereof and this Resolution shall be construed and enforced as if such illegal provision had not been contained herein.

SECTION 14.05. Notices. Unless otherwise provided herein, all demands, notices, approvals, consents, requests, opinions and other communications hereunder shall be in writing and shall be deemed to have been given when delivered in person or mailed by first class registered or certified mail, postage prepaid, addressed (a) if to the Board, at 625 St. Joseph Street, New Orleans, Louisiana 70165 (Attention: Executive Director) or (b) if to the Board of Liquidation, at Room 8E17, City Hall, 1300 Perdido Street, New Orleans, Louisiana 70112, Attention: David Gernhauser, Secretary). The Board and the Board of Liquidation may, by notice given hereunder, designate any further or different addresses to which subsequent

demands, notices, approvals, consents, requests, opinions or other communications shall be sent or persons to whose attention the same shall be directed.

SECTION 14.06. <u>Successors and Assigns.</u> This Resolution shall be binding upon, inure to the benefit of and be enforceable by the parties and their respective successors and assigns.

SECTION 14.07. <u>Applicable Law.</u> This Resolution shall be governed by the applicable laws of the State of Louisiana.

SECTION 14.08. <u>Counterparts.</u> This Resolution may be executed in several counterparts, each of which shall be an original and all of which together shall constitute but one and the same instrument.

This resolution having been submitted to a vote, the vote thereon was as follows:

<u>Member</u>	Yea	Nay	Absent	<u>Abstaining</u>
Suchitra Satpathi (for				
Mitchell J. Landrieu)	X			
William Raymond Manning	X			
Marion Bracy	X			
Kerri Kane	X			
Mark M. Moody			X	
Glen Pilie	X			
Florence Schornstein	X			
Charles F. Webb	X			
Beverly Wright, PhD.	X			
Loyce P. Wright	X			

And the resolution was declared adopted on this 21st day of May, 2014.

#### STATE OF LOUISIANA

#### PARISH OF ORLEANS

I, the undersigned Executive Director of the Sewerage and Water Board of New Orleans (the "Board"), do hereby certify that the foregoing pages constitute a true and correct copy of a resolution adopted by the Board on May 21, 2014, authorizing the issuance from time to time of Sewerage Service Revenue Bonds of the City of New Orleans, Louisiana, providing for the general terms, form, manner of payment and security for payment of said bonds, providing for the issuance of a series of Sewerage Service Revenue and Refunding Bonds, and providing for other matters in connection therewith.

IN FAITH WHEREOF, witness my official signature on this, the 21st day of May, 2014.

Moutumble

Executive Director



#### APPENDIX G

PROPOSED FORM OF LEGAL OPINION



Foley & Judell, L.L.P.
One Canal Place, Suite 2600
New Orleans, Louisiana 70130
(504) 568-1249 - FAX (504) 565-3900

Auzenne & Associates, L.L.C. 1615 Poydras Street, Suite 900 New Orleans, Louisiana 70112 (504) 566-7999 - FAX (504) 569-0087

March 3, 2021

Sewerage and Water Board of New Orleans New Orleans, Louisiana

Board of Liquidation, City Debt New Orleans, Louisiana

#### \$194,300,000 CITY OF NEW ORLEANS, LOUISIANA TAXABLE WATER REVENUE REFUNDING BONDS, SERIES 2021

We have acted as co-bond counsel to the City of New Orleans, Louisiana (the "City"), in connection with the issuance by the City of the captioned bonds (the "Bonds"). The Bonds are issued in fully registered form, are dated, bear interest at the rates, mature on the dates and in the principal amounts, and are subject to redemption as set forth in the Resolution (hereinafter defined).

Capitalized terms used herein and not specifically defined have the meanings assigned to them in the Resolution.

The Bonds have been issued by the City, acting by and through the Sewerage and Water Board of New Orleans (the "Board") and the Board of Liquidation, City Debt (the "Board of Liquidation"), pursuant to a General Water Revenue Bond Resolution adopted by the Board on May 21, 2014 and a Third Supplemental Water Revenue Bond Resolution adopted by the Board on January 20, 2021 (collectively, the "Resolution"), for the purpose of (i) refunding the City's outstanding Water Revenue and Refunding Bonds, Series 2014 (the "Series 2014 Bonds"), maturing December 1, 2021, December 1, 2027 to 2029, inclusive, December 1, 2034 and December 1, 2044, and Water Revenue Bonds, Series 2015 (the "Series 2015 Bonds"), maturing December 1, 2021, December 1, 2029 to 2035, inclusive, December 1, 2040 and December 1, 2045 (collectively, the "Refunded Bonds"); (ii) funding reserves, and (iii) paying costs of issuance. The Bonds are issued under the authority conferred by Part III of Chapter 9, Title 33 of the Louisiana Revised Statutes of 1950, as amended, and other constitutional and statutory authority (the "Act").

In accordance with the Resolution, the Issuer has entered into a Defeasance and Escrow Deposit Agreement (the "Escrow Agreement") with U.S. Bank National Association, in the city of Brandon, Mississippi (the "Escrow Agent"), pursuant to which a portion of the proceeds of the Bonds have been deposited in trust with the Escrow Agent for the purpose of providing moneys to

Sewerage and Water Board of New Orleans New Orleans, Louisiana

Board of Liquidation, City Debt New Orleans, Louisiana

pay the principal of and interest on the Refunded Bonds to their respective maturities or earlier redemption, as set forth therein, irrevocable provision having been made in the Resolution and related documents for the call for redemption of those Refunded Bonds subject to early redemption.

The Board has entered into certain covenants and agreements with the owners of the Bonds with respect to the security and payment of the Bonds, including a covenant with respect to the fixing of rates and collection of fees for the services and facilities of the System (as defined in the Resolution) and a provision for the issuance of *pari passu* obligations hereafter under certain conditions and restrictions, for the terms of which reference is made to the Resolution.

We have examined the provisions of the Constitution and statutes of the State of Louisiana (the "State"), a certified transcript of the proceedings of the governing authority of the Board relating to the issuance of the Bonds, and such other documents, proofs and matters of law as we deemed necessary to render this opinion.

As to questions of fact material to our opinion, we have relied upon the certified proceedings and other certifications of public officials and others furnished to us without undertaking to verify the same by independent investigation.

On the basis of the foregoing examinations, we are of the opinion, as of the date hereof and under existing law, that:

- 1. The Bonds have been duly authorized, executed and delivered and constitute legally binding special and limited obligations of the City.
- 2. The Resolution creates the valid pledge and dedication which it purports to create of the funds and accounts held by the Board of Liquidation under the Resolution and the Net Revenues and the moneys, securities and funds held or set aside under the Resolution, subject to the provisions of the Resolution requiring or permitting the application thereof for the purposes and on the terms and conditions set forth in the Resolution.
- 3. The Bonds have been issued on a parity with respect to the pledge of Net Revenues with the City's outstanding (i) unrefunded Series 2014 Bonds; and (ii) unrefunded Series 2015 Bonds (collectively, the "Outstanding Parity Bonds"), and rank equally with and enjoy complete parity of lien with the Outstanding Parity Bonds on the Net Revenues. The lien of the owners of the Bonds and the Outstanding Parity Bonds on the Net Revenues will be superior to the lien on such Net Revenues of any obligations hereafter issued and payable therefrom except *pari passu* additional obligations hereafter issued within the terms, limitations and restrictions contained in the Resolution.

Board of Liquidation, City Debt New Orleans, Louisiana

- 4. Interest on the Bonds is not excludable from gross income for federal income tax purposes.
- 5. Under the Act, the Bonds are exempt from all taxation in Louisiana for state, parish, municipal or other local purposes.

Except as stated above, we express no opinion as to any federal, state or local tax consequences resulting from the ownership of, receipt or accrual of interest on, or disposition of the Bonds.

It is to be understood that the rights of the owners of the Bonds and the enforceability of the Bonds and the Resolution 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 enforceability may also be subject to the exercise of the sovereign police powers of the State, or its governmental bodies, and the exercise of judicial discretion in appropriate cases.

Respectfully submitted,



#### APPENDIX H

FORM OF CONTINUING DISCLOSURE CERTIFICATE



#### CONTINUING DISCLOSURE CERTIFICATE

# \$194,300,000 TAXABLE WATER REVENUE REFUNDING BONDS, SERIES 2021 OF THE CITY OF NEW ORLEANS, LOUISIANA

This Continuing Disclosure Certificate (the "Disclosure Certificate") is executed and delivered by the City of New Orleans, Louisiana (the "City"), acting through its duly elected Mayor, the Board of Liquidation, City Debt (the "Board of Liquidation" or the "Board"), and the Sewerage and Water Board of New Orleans (the "Sewerage and Water Board"), the entities created and charged by law with the issuance and administration of the water revenue bonds of the City, acting through its undersigned officers, duly authorized hereunto, in connection with the issuance of \$194,300,000 City of New Orleans, Louisiana Water Revenue Refunding Bonds, Series 2021 (the "Bonds"). The Bonds are being issued pursuant to the General Water Revenue Bond Resolution adopted by the Sewerage and Water Board on May 21, 2014 (the "General Resolution"), as supplemented through the Third Supplemental Water Revenue Bond Resolution adopted by the Sewerage and Water Board on January 20, 2021; a Resolution adopted by the Council of the City of New Orleans on January 28, 2021; and a Resolution adopted by the Board of Liquidation on January 20, 2021 (collectively, the "Resolutions"); and the Bonds are described in that certain Official Statement dated February 4, 2021, which contains certain information concerning the City, the Board and the Sewerage and Water Board, the security for the Bonds, and certain financial and other information relating thereto. The City, the Board and the Sewerage and Water Board covenant and agree as follows:

SECTION 1. *Definitions*. In addition to the definitions set forth in the Resolutions, which apply to any capitalized term used in this Disclosure Certificate unless otherwise defined in this Section, the following capitalized terms shall have the following meanings:

- "Annual Report" shall mean any Annual Report provided by the City pursuant to, and as described in, Sections 3 and 4 of this Disclosure Certificate.
- "Beneficial Owner" shall mean any person who has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries).
- "Dissemination Agent" shall mean the duly appointed Secretary of the Board of Liquidation, or any successor Dissemination Agent designated by the City acting through the Board of Liquidation.
- **"EMMA"** shall mean the internet-based portal referred to as the Electronic Municipal Market Access system operated and maintained by the Municipal Securities Rulemaking Board. The online address of EMMA is <a href="https://www.emma.msrb.org">www.emma.msrb.org</a>.
- "GAAP" shall mean generally accepted accounting principles, as such principles are prescribed, in part, by the Financial Accounting Standards Board and modified by the Government 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 Disclosure Certificate.
- "MSRB" shall mean the Municipal Securities Rulemaking Board, which has been designated by the Securities and Exchange Commission as the single centralized repository for the collection and

availability of continuing disclosure documents for purpose of the Rule. The continuing disclosure documents must be provided to the MSRB in searchable portable document format (PDF) to the following:

#### Municipal Securities Rulemaking Board Electronic Municipal Market Access Center www.emma.msrb.org

"1934 Act" shall mean the Securities Exchange Act of 1934, as amended.

"Official Statement" shall mean the Official Statement with respect to the Bonds dated February 4, 2021.

"Participating Underwriter" shall mean, collectively, each of the original underwriters of the Bonds required to comply with the Rule in connection with an offering of the Bonds, represented by J.P. Morgan Securities LLC.

"Rule" shall mean Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

"SEC" shall mean the Securities and Exchange Commission.

"Securities Counsel" shall mean legal counsel expert in federal securities law.

SECTION 2. Purpose of the Disclosure Certificate. This Disclosure Certificate is being executed and delivered by the City, the Board of Liquidation and the Sewerage and Water Board for the benefit of the owners of the Bonds, including owners of beneficial interests in the Bonds, and the Participating Underwriter, and in order to assist the Participating Underwriter in complying with SEC Rule 15c2-12(b)(5).

#### SECTION 3. Provision of Annual Reports.

- (a) Each year, the City, acting through the Board of Liquidation, and the Sewerage and Water Board shall provide, or shall cause the Dissemination Agent to provide, not later than eight (8) months from the end of the Sewerage and Water Board's fiscal year, commencing with the Sewerage and Water Board's Annual Report for its fiscal year ending December 31, 2021, to the MSRB an Annual Report for the preceding fiscal year which is consistent with the requirements of Section 4 of this Disclosure Certificate. Not later than five (5) business days prior to said date, the Sewerage and Water Board shall provide the Annual Report to the Dissemination Agent. 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 Disclosure Certificate.
- (b) If the Dissemination Agent is unable to provide to the MSRB an Annual Report by the date required in subsection (a) above of this Section 3, the Dissemination Agent, on behalf of the Sewerage and Water Board, shall send a notice, in a timely manner, to the MSRB, in substantially the form attached hereto as **Exhibit A**.
- (c) If the City's or the Sewerage and Water Board's fiscal year changes, the Dissemination Agent shall send written notice of such change to the MSRB, in substantially the form attached hereto as **Exhibit B**.

(d) In connection with providing the Annual Report, the Dissemination Agent is neither obligated nor responsible under this Disclosure Certificate 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 Annual Report shall contain or incorporate by reference the following:

- (a) Audited financial statements of the City and the Sewerage and Water Board for the preceding fiscal year. If any of the aforesaid audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a) hereof, the Annual Report shall contain unaudited financial statements in a format similar to the financial statements contained in the final Official Statement, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available.
- (b) Basis of accounting used by the City or the Sewerage and Water Board in reporting its financial statements. The City and the Sewerage and Water Board follow GAAP principles and mandated Louisiana statutory accounting requirements as in effect from time to time. In the event of any material change in such requirements, the impact of such changes will be described in the Annual Report of the year such change occurs.
- (c) Updates of the following tables in the Official Statement (such tables will be presented in the same format presented in the Official Statement and, for tables providing historical information, shall include the same number of years of historical information as in the table in the Official Statement):

Water Service Charges (All related charts)
Water Quantity Charge
Water System Historical Customers, Sales Per Customer
Largest Customers of the Water System
Historical Financial Operations
Projected Financial Operations

(d) Updates of the proposed issuance of additional bonds on a parity with the Bonds as described under the caption entitled "SECURITY AND SOURCE OF PAYMENT – Additional Bonds and Other Parity Senior Indebtedness" in the Official Statement.

Any or all of the items listed above may be incorporated by reference from other documents, including official statements of debt issues of the City or the Sewerage and Water Board, or related public entities, which have been submitted to EMMA or the SEC. If the document incorporated by reference is a deemed final official statement, it shall be available from the MSRB. The Commission shall clearly identify each such other document so incorporated by reference.

#### SECTION 5. Reporting of Listed Events.

(a) The Dissemination Agent, on behalf of the City and the Sewerage and Water Board, covenants to provide, or cause to be provided, to the MSRB notice of the occurrence of any of the following events with respect to the Bonds, in a timely manner not in excess of ten (10) business days after the

occurrence of the event. Each notice shall be so captioned and shall prominently state the date, title and CUSIP numbers of the Bonds:

- (i) Principal and interest payment delinquencies;
- (ii) Non-payment related defaults, if material;
- (iii) Unscheduled draws on debt service reserves reflecting financial difficulties;
- (iv) Unscheduled draws on credit enhancements reflecting financial difficulties;
- (v) Substitution of credit or liquidity providers, or the failure of any credit or liquidity provider to perform;
- (vi) Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;
- (vii) Modifications to rights of Bondholders, if material;
- (viii) Bond calls, if material, and tender offers;
- (ix) Defeasances;
- (x) Release, substitution, or sale of property securing repayment of the Bonds, if material;
- (xi) Rating changes;
- (xii) Bankruptcy, insolvency, receivership, or similar event of the City or the Sewerage and Water Board<sup>(1)</sup>;
- (xiii) The consummation of a merger, consolidation, or acquisition involving the City or the Sewerage and Water Board or the sale of all or substantially all of the assets of the City or the Sewerage and Water Board, 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;
- (xiv) Appointment of a successor or additional trustee or paying agent or the change of name of a trustee or paying agent, if material;
- (xv) Incurrence of a financial obligation of the City or the Sewerage and Water Board, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the City or the Sewerage and Water Board, any of which affect Bondholders; or
- (xvi) Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of the City or the Sewerage and Water Board, any of which reflect financial difficulties.
- (b) In connection with providing a notice of the occurrence of a Listed Event, the Board, solely in its capacity as Dissemination Agent, is not obligated or responsible under this Disclosure Certificate 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.

<sup>-</sup>

<sup>(1)</sup> For the purposes of this event, the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the City or the Sewerage and Water Board in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court of governmental authority has assumed jurisdiction over substantially all of the assets or business of the City or the Sewerage and Water Board, or if such jurisdiction has been assumed by leaving the existing government body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan or reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction or substantially all of the assets or business of the City or the Sewerage and Water Board.

- (c) The Dissemination Agent, on behalf of the City and the Sewerage and Water Board, acknowledges that the "rating changes" referred to above in Section 5(a)(xi) of this Disclosure Certificate may include, without limitation, any change in any rating on the Bonds or other indebtedness issued under the General Resolution.
- (d) The Dissemination Agent, on behalf of the City and the Sewerage and Water Board, 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 Bonds, the Dissemination Agent, on behalf of the City or the Sewerage and Water Board, does not apply for or participate in obtaining such credit enhancement, and such credit enhancement is not described in the Official Statement.
- (e) The term "financial obligation" as used in Section 5(a)(xv) and (xvi) above shall have the meaning given to such term in the Issuer's Post-Issuance Compliance Policy for Municipal Securities in effect on the date hereof, as said policy may be amended from time to time.
- SECTION 6. *Mandatory Electronic Filing with EMMA*. All filings with the MSRB under this Disclosure Certificate 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 Release No. 59062 on December 5, 2008.

#### SECTION 7. Termination of Reporting Obligation.

- (a) The City's and the Sewerage and Water Board's obligations under this Disclosure Certificate shall terminate upon the legal defeasance of the General Resolution or the prior redemption or payment in full of all of the Bonds.
- (b) This Disclosure Certificate, or any provision hereof, shall be null and void in the event that the City, the Board and/or the Sewerage and Water Board (i) receives an opinion of Securities Counsel, addressed to the City, the Board and/or the Sewerage and Water Board, to the effect that those portions of the Rule, which require such provisions of this Disclosure Certificate, do not or no longer apply to the 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 Bonds, as shall be specified in such opinion, and (ii) files notice to such effect with the MSRB.
- SECTION 8. Dissemination Agent. The City and the Sewerage and Water Board, from time to time, may appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Certificate, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. The initial Dissemination Agent shall be the Board of Liquidation. Except as otherwise provided in this Disclosure Certificate, the Dissemination Agent shall not be responsible in any manner for the content of any notice or report prepared by the State of Louisiana (the "State") pursuant to this Disclosure Certificate.

#### SECTION 9. Amendment; Waiver.

- (a) Notwithstanding any other provision of this Disclosure Certificate, this Disclosure Certificate may be amended, and any provision of this Disclosure Certificate may be waived, provided that the following conditions are satisfied:
  - (1) if the amendment or waiver relates to the provisions of Section 3(a), (b), (c), 4 or 5(a) hereof, 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

City, the Board or the Sewerage and Water Board or the type of business conducted by the City, the Board or the Sewerage and Water Board;

- (2) this Disclosure Certificate, 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 Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and
- (3) the amendment or waiver does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Bondholders or Beneficial Owners.
- (b) In the event of any amendment to, or waiver of a provision of, this Disclosure Certificate, the City, the Board and the Sewerage and Water Board 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 Disclosure Certificate, 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 Disclosure Certificate, 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 City or the Sewerage and Water Board, or the Dissemination Agent at the written direction of the City or the Sewerage and Water Board with the MSRB.

SECTION 10. Additional Information. Nothing in this Disclosure Certificate shall be deemed to prevent the City, the Board or the Sewerage and Water Board from disseminating any other information, using the means of dissemination set forth in this Disclosure Certificate 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 Disclosure Certificate. If the City, the Board or the Sewerage and Water Board 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 Disclosure Certificate, the City, the Board or the Sewerage and Water Board shall have no obligation under this Disclosure Certificate 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 City, the Dissemination Agent or the Sewerage and Water Board to comply with any provision of this Disclosure Certificate, any Bondholder or Beneficial Owner may bring an action to obtain specific performance of the obligations of the City, the Dissemination Agent or the Sewerage and Water Board under this Disclosure Certificate, 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 Disclosure Certificate shall not constitute a default with respect to the Bonds or under the General Resolution authorizing the issuance of the Bonds.

SECTION 12. *Duties of Dissemination Agent*. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Certificate.

SECTION 13. *Beneficiaries*. This Disclosure Certificate shall inure solely to the benefit of the City, the Dissemination Agent, the Sewerage and Water Board, 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 Disclosure Certificate, and, in the sole determination of the City, the Sewerage and Water Board or the Dissemination Agent, as applicable, subject to technical and economic feasibility, the City, the Sewerage and Water Board or the 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 City, the Board of Liquidation and the Sewerage and Water Board acknowledge and understand 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 City, the Board of Liquidation and the Sewerage and Water Board, and that under some circumstances, compliance with this Disclosure Certificate, without additional disclosures or other action, may not fully discharge all duties and obligations of the City, the Board of Liquidation and the Sewerage and Water Board under such laws.

SECTION 16. Governing Law. This Disclosure Certificate shall be construed and interpreted in accordance with the laws of the State, and any suits and actions arising out of this Disclosure Certificate shall be instituted in a court of competent jurisdiction in the State. Notwithstanding the foregoing, to the extent this Disclosure Certificate addresses matters of federal securities laws, including the Rule, this Disclosure Certificate shall be construed and interpreted in accordance with such federal securities laws and official interpretations thereof.

[Remainder of page left intentionally blank]

		ne undersigned has executed this Continuing Disclosure Certificate of
this, the	day of	
		CITY OF NEW ORLEANS, LOUISIANA
		By:
		Name: LaToya Cantrell Title: Mayor
		BOARD OF LIQUIDATION, CITY DEBT
		By:
Attest:		
		By:

## **EXHIBIT A** to Continuing Disclosure Certificate

#### NOTICE OF FAILURE TO FILE ANNUAL REPORT

# \$194,300,000 TAXABLE WATER REVENUE REFUNDING BONDS, SERIES 2021 OF THE CITY OF NEW ORLEANS, LOUISIANA

NOTICE IS HEREBY GIVE Annual Report as required by the Cor		has not provided ar tificate executed in connection with
the issuance of Bonds. The	_	
filed by		
Date:		
	BOARD OF LI	QUIDATION, CITY DEBT
	Bv:	
	Name:	
	Title:	

### **EXHIBIT B**

### NOTICE OF CHANGE IN \_\_\_\_\_ FISCAL YEAR

Name of Obligated Person:	
	O Taxable Water Revenue Refunding Bonds, Series 2021 of few Orleans, Louisiana
Date of Bonds:, 2021	
NOTICE IS HEREBY GIV Previously, the fiscal y	VEN that the fiscal year of the changed. year ended on It now ends on
	CITY OF NEW ORLEANS, LOUISIANA
	By:
	Name: Title: Mayor
	SEWERAGE AND WATER BOARD OF NEW ORLEANS
	By:
	Name:
	Title:

#### APPENDIX I

DTC BOOK-ENTRY ONLY SYSTEM



#### **BOOK-ENTRY ONLY SYSTEM**

The Bonds initially will be issued solely in book-entry form to be held in the book-entry only system maintained by The Depository Trust Company ("DTC"), New York, New York. So long as such book-entry only system is used, only DTC will receive or have the right to receive physical delivery of the Bonds and, except as otherwise provided herein with respect to Beneficial Owners of Beneficial Ownership Interests, Beneficial Owners will not be or be considered to be, and will not have any rights as owners or holders of the Bonds under the Bond Resolution.

The following information about the book-entry only system applicable to the Bonds has been supplied by DTC. The Issuer makes no representations, warranties or guarantees with respect to its accuracy or completeness.

DTC will initially act as securities depository for the Bonds. The Bonds will be issued as fully registered bonds registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully registered Bond will be issued for each maturity of the 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 Cleaning Corporation and Fixed Income Cleaning 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 an S&P Global Rating of AA+. The DTC Rules applicable to its Participants are on file with the U.S. Securities and Exchange Commission (the "SEC"). More information about DTC can be found at www.dtcc.com.

Purchases of the Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial

Owner entered into the transaction. Transfers of ownership interests in the Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

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

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Bond documents. For example, Beneficial Owners of Bonds may wish to ascertain that the nominee holding the Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

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

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Issuer 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 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

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

DTC may discontinue providing its services as depository with respect to the Bonds at any time by giving reasonable notice to the Issuer or Paying Agent. Under such circumstances, in the event that a successor depository is not obtained, the Bonds are required to be printed and delivered.

The Issuer may decide to discontinue use of the system of book-entry only transfers through DTC (or a successor securities depository). In that event, Bonds will be printed and delivered to DTC.

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

THE ISSUER AND UNDERWRITER CANNOT AND DO NOT GIVE ANY ASSURANCES THAT THE DTC PARTICIPANTS OR THE INDIRECT PARTICIPANTS WILL DISTRIBUTE TO THE BENEFICIAL OWNERS OF THE BONDS (i) PAYMENTS OF PRINCIPAL OF OR INTEREST AND PREMIUM, IF ANY, ON THE BONDS, (ii) CONFIRMATION OF BENEFICIAL OWNERSHIP INTERESTS IN BONDS, OR (iii) REDEMPTION OR OTHER NOTICES SENT TO DTC OR CEDE & CO., ITS NOMINEE, AS THE REGISTERED OWNERS OF THE BONDS, OR THAT THEY WILL DO SO ON A TIMELY BASIS OR THAT DTC, DTC PARTICIPANTS OR INDIRECT PARTICIPANTS WILL SERVE AND ACT IN THE MANNER DESCRIBED IN THIS OFFICIAL STATEMENT. THE CURRENT "RULES" APPLICABLE TO DTC ARE ON FILE WITH THE SEC, AND THE CURRENT "PROCEDURES" OF DTC TO BE FOLLOWED IN DEALING WITH DTC PARTICIPANTS ARE ON FILE WITH DTC.

NEITHER THE ISSUER, UNDERWRITER NOR THE PAYING AGENT WILL HAVE ANY RESPONSIBILITY OR OBLIGATIONS TO SUCH DTC PARTICIPANTS OR THE BENEFICIAL OWNERS WITH RESPECT TO (1) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DTC PARTICIPANT; (2) THE PAYMENT BY ANY DTC PARTICIPANT OF ANY AMOUNT DUE TO ANY BENEFICIAL OWNER IN RESPECT OF THE PRINCIPAL AMOUNT OR INTEREST OR PREMIUM, IF ANY, ON THE BONDS; (3) THE DELIVERY BY ANY DTC PARTICIPANT OF ANY NOTICE TO ANY BENEFICIAL OWNER WHICH IS REQUIRED OR PERMITTED UNDER THE TERMS OF THE RESOLUTION TO BE GIVEN TO BONDHOLDERS; (4) THE SELECTION OF THE BENEFICIAL OWNERS TO RECEIVE PAYMENT IN THE EVENT OF ANY PARTIAL REDEMPTION OF THE BONDS; OR (5) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC AS BONDHOLDER.



#### APPENDIX J

SPECIMEN MUNICIPAL BOND INSURANCE POLICY





## MUNICIPAL BOND INSURANCE POLICY

ISSUER: Policy No: -N

BONDS: \$ in aggregate principal amount of 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 the pursuant

Page 2 of 2 Policy No. -N

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.



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

Form 500NY (5/90)

