AGENDA

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
   None
5. PUBLIC PARTICIPATION
6. OLD BUSINESS
7. NEW BUSINESS
   B. Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in an Amount Not to Exceed $515,000,000
   C. Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Refunding Bonds in an Amount Not to Exceed $800,000,000
8. REPORTS
9. LOOK AHEAD
   Next Audit Committee Meetings
   A. Regular Meeting February 21, 2020 at 8:00 a.m.
10. INFORMATION
11. OTHER MATTERS
12. ADJOURNMENT
Date: February 12, 2020
To: Great Lakes Water Authority Audit Committee
From: Nicolette Bateson, CPA, Chief Financial Officer/Treasurer
Re: Review of Draft Feasibility Consultant Report- 2020 Water and Sewer Bond Transactions

Background: Due to favorable interest rates, the Great Lakes Water Authority (GLWA) has initiated the process for a potential bond refunding transaction. In addition, the Detroit Water & Sewerage Department (DWSD) is seeking $100 million in new money for the DWSD water system in accordance with the lease agreements between the City of Detroit and the Great Lakes Water Authority.

Analysis: The GLWA Audit Committee reviewed the latest ten-year financial forecast on October 19, 2019 and began reviewing the FY 2021 & FY 2022 Biennial Budget and related five-year financial plan on December 19, 2019.
As we begin the next level of analysis for the upcoming transaction, DWSD has submitted a preliminary ten-year financial forecast. GLWA's feasibility consultant, The Foster Group, has reviewed this forecast and provides a preliminary review of the consolidated GLWA and DWSD forecast to support the upcoming transaction.

Proposed Action: Receive and file report.
FY 2021 – FY 2030 Feasibility Forecast Introduction

• This presentation has been prepared to summarize the 10 year financial forecast for the GLWA Water and Sewer Funds

• An initial draft presented last month focused on the GLWA Regional System Forecast
  ✓ Consistent with 2030 Financial Plan presented with FY 2021 Budget
  ✓ Changes are not material in this update

• This update focuses on the Comprehensive forecast including PRELIMINARY forecasts for the DWSD Local System
DWSD Local System Forecasts
DWSD Local System Forecast Assumptions

• Forecast represents a coordinated effort between GLWA and DWSD and ties to DWSD Budget and preliminary long term plan submitted to GLWA

✓ Minor modifications to align with GLWA assumptions re: wholesale charges, debt service schedules, etc.

• Revenue assumes 3% annual rate increases and 0.25% in annual account growth
DWSD Local System Forecast Capital Financing Strategy

- Utilize issuance of revenue bonds by GLWA on behalf of DWSD, in conjunction with use of Lease Payments to the DWSD I&E Funds, to finance capital improvements;
- Utilize a portion of the Lease Payment to finance ALL “post bifurcation” Local System debt service - unless revenues are sufficient to not do so
DWSD Local System Forecast
PRELIMINARY CIP Assumptions

• Original DWSD CIP does not contain material amounts beyond for FY 2024
• For purposes of the Water Feasibility Forecast, we’ve used updated estimates provided by DWSD:
  ✓ ~ $60 million through 2023, ~ $25 million thereafter
• For purposes of the Sewer Feasibility Forecast, we’ve assumed:
  ✓ $20 million in FY 2020, $40 million FY 2021 through 2023, $35 million thereafter
DWSD Local System Forecast
CIP Financing Plan Forecast

• The 2020 Bonds are being designed to generate $100 million for the DWSD Local Water System.

• There are pending SRF Loans designed to support the DWSD Local Water and Sewer Systems.

• At the assumptions on the prior slide, our current forecast indicates no further bond sales for the Local Systems prior to 2030.
DWSD Local System Forecast
Sewer Forecast Summary Observations

• A portion (21% and 15%) of the Lease Payment will be required to meet debt service obligations in FY 2020 and FY 2021

• ALL of the Lease Payment is forecasted to be transferred to I&E from FY 2022 - FY 2030

• Healthy I&E Fund balances are forecasted throughout the forecast period
DWSD Local System Forecast
Sewer Forecast Summary Observations

• Forecasted “Local System Debt Service Coverage Ratios” are positive starting in FY 2022

• We’ve included a “Hypothetical Debt Service Coverage Ratio” that demonstrates the effect of using the Lease Payment for debt service, and the impact on consolidated debt service coverage levels

✓ This metric, which does not align with “Rate Covenant” debt service coverage calculations, is greater than 1.0 throughout the forecast period
# DWSD Local System Forecast

## Sewer Forecast Summary - $ millions

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<thead>
<tr>
<th>Revenue Requirements Plan</th>
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<th>2021</th>
<th>2022</th>
<th>2023</th>
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(a) Hypothetical calculated ratio of including diverted Lease Payment amount from Line 9 as Net Revenue. Does not align with Rate Covenant as set forth in MBO.
DWSD Local System Forecast
Water Forecast Summary Observations

• A portion of the Lease Payment will be required to meet debt service obligations through FY 2027

✓ Almost 50% of the cumulative Lease Payments in FYs 2021 - 2023

• Healthy I&E Fund balances are forecasted in early years, falling off towards end of forecast period
DWSD Local System Forecast

Water Forecast Summary Observations

- Forecasted “Local System Debt Service Coverage Ratios” are less than 1.0 through FY 2025
  - As low as 0.86 in FY 2023
    - Hypothetical other metrics are greater than 1.0, but do not align with “Rate Covenant” coverage calculations
- This has the effect of lowering the Consolidated System debt service coverage ratios
  - The “Hypothetical Debt Service Coverage Ratio” for Water (which again does not align with “Rate Covenant” debt service coverage calculations), is lower than that for Sewer but greater than 1.0 throughout the forecast period
### Revenue Requirements Plan

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### Capital Financing Plan

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*(a) Hypothetical calculated ratio of including diverted Lease Payment amount from Line 9 as Net Revenue. Does not align with Rate Covenant as set forth in MBO.*
Consolidated System Forecasts
Regional System Forecast Capital Financing Plan Update

- Existing Fund balances, revenue transfers to I&E, and pending SRF Loans forecasted to be sufficient to fund Regional System CIP through FY 2022
- Forecast includes revenue bond sales every other year (in odd number years) starting in FY 2023
Consolidated Regional / Local System Forecast Observations

- Steady growth in **Sewer** Debt Service Coverage ratios
  - Steady growth in Regional System I&E Deposits
  - Decreased reliance of Lease Payment to fund a portion of Local System Debt Service
Consolidated Regional / Local System Forecast Observations

- Stable **Water** Debt Service Coverage ratios
  - Moderate growth in Regional System I&E Deposits, offset by:
    - Increased short term and continued long term reliance of Lease Payment to fund a portion of Local System Debt Service
  - Compared to Sewer, larger CIP requirements and need for larger future bond sales
# Combined Regional / Local System Sewer Forecast Summary - $ millions

<table>
<thead>
<tr>
<th>Revenue Requirements Plan</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>2030</th>
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<tbody>
<tr>
<td>1 Revenues</td>
<td>579.3</td>
<td>597.9</td>
<td>623.9</td>
<td>637.7</td>
<td>651.9</td>
<td>672.9</td>
<td>692.9</td>
<td>713.6</td>
<td>734.7</td>
<td>756.6</td>
<td>779.3</td>
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<tr>
<td>2 Operating Expenses</td>
<td>270.8</td>
<td>269.7</td>
<td>275.8</td>
<td>283.1</td>
<td>276.1</td>
<td>281.9</td>
<td>288.3</td>
<td>294.9</td>
<td>301.6</td>
<td>308.5</td>
<td>315.5</td>
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<tr>
<td>3 Net Revenues (1)-(2)-(3)</td>
<td>308.5</td>
<td>328.2</td>
<td>348.1</td>
<td>354.6</td>
<td>375.8</td>
<td>390.9</td>
<td>404.5</td>
<td>418.7</td>
<td>433.1</td>
<td>448.2</td>
<td>463.8</td>
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<tr>
<td>4 Debt Service Obligations</td>
<td>245.5</td>
<td>241.6</td>
<td>247.6</td>
<td>245.7</td>
<td>258.1</td>
<td>245.8</td>
<td>259.2</td>
<td>263.8</td>
<td>266.1</td>
<td>259.7</td>
<td>271.5</td>
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<td>5 MBO Requirements</td>
<td>17.7</td>
<td>17.8</td>
<td>18.0</td>
<td>18.0</td>
<td>10.2</td>
<td>12.5</td>
<td>12.5</td>
<td>12.2</td>
<td>11.9</td>
<td>11.9</td>
<td>11.9</td>
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<tr>
<td>6 Lease Payment to Local I&amp;E Fund</td>
<td>21.6</td>
<td>23.3</td>
<td>27.5</td>
<td>27.5</td>
<td>27.5</td>
<td>27.5</td>
<td>27.5</td>
<td>27.5</td>
<td>27.5</td>
<td>27.5</td>
<td>27.5</td>
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<tr>
<td>7 Available for I&amp;E &amp; Rsrvs (3)-(4,5,6)</td>
<td>23.7</td>
<td>45.5</td>
<td>55.0</td>
<td>63.4</td>
<td>80.0</td>
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<td>105.3</td>
<td>115.2</td>
<td>127.7</td>
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<table>
<thead>
<tr>
<th>Debt Service Coverage</th>
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<tbody>
<tr>
<td>9 Senior Lien Bonds</td>
</tr>
<tr>
<td>10 Senior and Second Lien Bonds</td>
</tr>
<tr>
<td>11 All Bonds, including SRF</td>
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</table>

<table>
<thead>
<tr>
<th>Regional System Capital Financing Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Existing Construction Funds</td>
</tr>
<tr>
<td>13 Existing I&amp;E Funds</td>
</tr>
<tr>
<td>14 DWSD Shortfall Repayment</td>
</tr>
<tr>
<td>15 I&amp;E Deposits from Revenues</td>
</tr>
<tr>
<td>16 SRF Loan Proceeds</td>
</tr>
<tr>
<td>17 Investment Income - Construction Fund</td>
</tr>
<tr>
<td>18 Revenue Bond Proceeds</td>
</tr>
<tr>
<td>19 CIP Funding Requirements *</td>
</tr>
<tr>
<td>20 Ending Balance - I&amp;E</td>
</tr>
<tr>
<td>21 Ending Balance - Construction Funds</td>
</tr>
</tbody>
</table>

* Includes Capital Outlay
## Combined Regional / Local System Water Forecast Summary - $ millions

<table>
<thead>
<tr>
<th>Revenue Requirements Plan</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
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<th>2028</th>
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<tbody>
<tr>
<td>1</td>
<td>Revenues</td>
<td>407.3</td>
<td>422.4</td>
<td>434.7</td>
<td>447.3</td>
<td>460.3</td>
<td>473.7</td>
<td>487.6</td>
<td>501.8</td>
<td>516.5</td>
<td>531.7</td>
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<tr>
<td>2</td>
<td>Operating Expenses</td>
<td>176.9</td>
<td>183.9</td>
<td>187.5</td>
<td>190.0</td>
<td>183.1</td>
<td>187.5</td>
<td>191.6</td>
<td>195.8</td>
<td>200.2</td>
<td>204.6</td>
</tr>
<tr>
<td>3</td>
<td>Net Revenues (1)-(2)-(3)</td>
<td>230.4</td>
<td>238.5</td>
<td>247.1</td>
<td>257.3</td>
<td>277.2</td>
<td>286.3</td>
<td>296.0</td>
<td>306.0</td>
<td>316.3</td>
<td>327.1</td>
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<tr>
<td>4</td>
<td>Debt Service Obligations</td>
<td>175.2</td>
<td>185.5</td>
<td>186.2</td>
<td>202.4</td>
<td>212.3</td>
<td>216.3</td>
<td>223.6</td>
<td>226.7</td>
<td>234.2</td>
<td>237.6</td>
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<tr>
<td>5</td>
<td>MBO Requirements</td>
<td>12.7</td>
<td>12.7</td>
<td>12.8</td>
<td>12.9</td>
<td>6.9</td>
<td>8.3</td>
<td>8.1</td>
<td>8.0</td>
<td>8.0</td>
<td>8.0</td>
</tr>
<tr>
<td>6</td>
<td>Lease Payment to Local I&amp;E Fund</td>
<td>16.1</td>
<td>13.7</td>
<td>11.8</td>
<td>11.2</td>
<td>18.9</td>
<td>19.3</td>
<td>20.4</td>
<td>21.6</td>
<td>22.5</td>
<td>22.5</td>
</tr>
<tr>
<td>7</td>
<td>Available for I&amp;E &amp; Rsvs (3)-(4,5,6)</td>
<td>26.4</td>
<td>26.6</td>
<td>36.3</td>
<td>30.8</td>
<td>39.1</td>
<td>42.3</td>
<td>43.6</td>
<td>49.6</td>
<td>51.7</td>
<td>59.0</td>
</tr>
</tbody>
</table>

### Regional System Capital Financing Plan

| 12 | Existing Construction Funds | 92.3  |
| 13 | Existing I&E Funds          | 264.6 |
| 14 | I&E Deposits from Revenues  | 22.4  | 25.7  | 35.5  | 30.3  | 38.3  | 41.2  | 42.7  | 48.6  | 50.5  | 56.6  | 57.3  |
| 15 | SRF Loan Proceeds           | 12.9  | 12.4  | 16.6  | 18.9  | 18.5  | 19.0  | 18.7  | 18.5  | 3.3   | -     | -     |
| 16 | Investment Income - Construction Fund | 1.1   | 0.8   | 0.4   | 0.2   | 1.4   | 0.6   | 1.3   | 0.7   | 0.7   | 1.3   |     |
| 17 | Revenue Bond Proceeds       | -     | -     | -     | 239.7 | -     | 178.6 | -     | 192.7 | -     | 155.1 | -     |
| 18 | CIP Funding Requirements *  | 94.0  | 128.6 | 148.7 | 156.8 | 165.1 | 149.6 | 155.8 | 162.8 | 159.1 | 136.8 | 135.7 |
| 19 | Ending Balance - I&E        | 226.8 | 159.7 | 96.4  | 91.3  | 89.1  | 85.6  | 83.5  | 82.2  | 77.7  | 79.1  | 76.2  |
| 20 | Ending Balance - Construction Funds | 72.5   | 50.0  | 17.1  | 154.5 | 49.8  | 143.1 | 52.1  | 151.0 | 51.6  | 125.8 | 51.6  |

* Includes Capital Outlay

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**GLWA**  
Great Lakes Water Authority

**TFG**  
THE FOSTER GROUP
Date: February 12, 2020
To: Great Lakes Water Authority Audit Committee
From: Jon Wheatley, Public Finance Manager
Re: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in an Amount Not to Exceed $515,000,000 (Ordinance 2020-03)

Background: Included is the draft Great Lakes Water Authority (“GLWA”) Board letter for the February 12, 2020 Board meeting regarding the Series Ordinance for the proposed Water Supply System refunding and new money bond issue.

Key Provisions:
- Not to Exceed Par Amount: $515 million ($415 million for refunding, $100 million for new money)
- Maximum Coupon Rate: 6.00%
- Minimum Purchase Price: 98% of principal amount of bonds
- Maximum Underwriter Discount: 0.40% of principal amount of bonds
- Present Value Savings: Equal to or greater than 10.00% of principal amount of bonds to be refunded

Proposed Action: Audit Committee recommends that the Great Lakes Water Authority Board approve the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in an Amount Not to Exceed $515,000,000 as presented.
Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in an Amount Not to Exceed $515,000,000 (Ordinance 2020-03)

MOTION

Upon recommendation of Sue McCormick, Chief Executive Officer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), approve the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in an Amount Not to Exceed $515,000,000 as presented, and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.
BACKGROUND

In order for the Great Lakes Water Authority ("GLWA") to proceed with the refunding of various outstanding water supply system bonds for the purpose of achieving annual debt service savings, the GLWA Board must approve the included resolution approving the Series Ordinance. As part of the proposed transaction, there is also a new money piece to be issued on behalf of the city of Detroit Water and Sewerage Department (DWSD).

The Series Ordinance sets forth the guidelines for the New Money and Refunding Bonds and authorizes the Chief Executive Officer of the Chief Financial Officer to execute the final terms of the Bonds, paying issuance costs and signing of the Bond Purchase Agreement, within the parameters set forth in the Series Ordinance.

JUSTIFICATION

New Money Portion- The authorized amount for the New Money Bonds in Section 3, page 4 is for an aggregate principal amount not to exceed $100,000,000. GLWA will be issuing water revenue bonds on behalf of DWSD for improvements to their local water system.

Refunding Portion- The authorized amount for the Refunding Bonds in Section 3, page 4 is for an aggregate principal amount of not to exceed $415,000,000. The final par amount of the Refunding Bonds will be determined at the time of pricing and is based on current bond market pricing levels, issuance costs and the par amount of the bonds to be refunded as determined by the savings level achieved. While the approval of the resolution gives GLWA the authorization to issue refunding bonds, GLWA does not have to proceed with the refunding if market conditions become less favorable when it comes time to price the bonds.

Key Provisions:
- Not to Exceed Par Amount: $515 million ($415 million for refunding, $100 million for new money)
- Maximum Coupon Rate: 6.00%
- Minimum Purchase Price: 98% of principal amount of bonds
- Maximum Underwriter Discount: 0.40% of principal amount of bonds
- Present Value Savings: Equal to or greater than 10.00% of principal amount of bonds to be refunded
Additional Provisions:
Similar to the 2016 and 2018 water and sewer bond ordinances approved by the GLWA Board, Ordinance No. 2020-03 also contains the “springing amendment” provision in Section 23- Amendments to Ordinance. As noted on page 24, this section gives GLWA the ability to reduce or eliminate the bond reserve requirement for the senior lien bonds when at least 2 of the 3 national rating agencies rate the senior lien bonds in the AA category, provided that the reduction in the reserve requirement would not negatively affect the outstanding ratings. The amendments will become effective upon the deemed consent of at least 51% of the holders of the outstanding senior lien bonds. GLWA will add this springing amendment to each future series ordinance to obtain the 51% consent level. The currently level of water consents achieved is 33.7% for senior lien bonds and 84.2% for second lien bonds, before the issuance of the bonds herein.

BUDGET IMPACT
Savings as a result of the proposed Water Refunding Bonds have not been included in the FY 2020 or FY 2021 financial plan. If savings are achieved as a result of the proposed refunding, a budget amendment may be required for FY 2020 and/or FY 2021 depending on the final pricing and savings structure on the bonds.

COMMITTEE REVIEW
This matter was reviewed by the GLWA Audit Committee at its special meeting on February 12, 2020. It is anticipated that the Audit Committee will recommend approve the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in an Amount Not to Exceed $515,000,000 as presented.
GREAT LAKES WATER AUTHORITY  
ORDINANCE NO. 2020-03  

SERIES ORDINANCE AUTHORIZING ISSUANCE AND SALE OF WATER SUPPLY SYSTEM REVENUE AND REVENUE REFUNDING BONDS IN A PRINCIPAL AMOUNT NOT TO EXCEED $515,000,000

WHEREAS, pursuant to Resolution No. 2015-10-02 adopted by the Board of Directors of the Great Lakes Water Authority (the “Authority”) on October 7, 2015, the Authority Board approved and adopted Master Bond Ordinance No. 2015-01 (as subsequently amended through the date hereof, the “Ordinance”), which authorizes the issuance by the Authority of Water Supply System Revenue Bonds; and

WHEREAS, the Ordinance authorizes the issuance of such Water Supply System Revenue Bonds in one or more Series pursuant to a Series Ordinance authorizing the issuance and sale of such Series; and

WHEREAS, the Authority Board has determined that it is necessary to authorize at this time one or more Series of Bonds to provide moneys (i) to refund a portion of the Outstanding DWSD Water Bonds (the “Bonds To Be Refunded”) and cause the Bonds To Be Refunded to be defeased in accordance with the Ordinance and (ii) to pay all or part of the costs of the hereinafter described improvements, enlargements, extensions and repairs to the Local Water System.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE GREAT LAKES WATER AUTHORITY AS FOLLOWS:

Section 1. Authority for this Series Ordinance. This Series Ordinance (the “2020 Series Ordinance”) is adopted pursuant to Section 1102(1) of the Ordinance.

Section 2. Definitions. Except as otherwise provided in this 2020 Series Ordinance, all terms which are defined in Section 101 of the Ordinance shall have the same meanings, respectively, in this 2020 Series Ordinance as such terms are given in the Ordinance. In addition, the following terms shall have the following meanings unless the context shall clearly indicate some other meaning:

(a) “2020 Bonds” means, collectively, the 2020 New Money Bonds and the 2020 Refunding Bonds authorized by Section 3 of this 2020 Series Ordinance.

(b) “2020 New Money Bonds” means those 2020 Bonds issued for the purpose of paying, reimbursing and/or refinancing Project Costs.

(c) “2020 Project” means a portion of the improvements, enlargements and extensions to the Local Water System identified in the Detroit Capital Improvement Program, all as more fully described in the Sale Order.

(d) “2020 Refunding Bonds” means those 2020 Bonds issued for the purpose of refunding the Bonds To Be Refunded and paying Refunding Costs.
(e) “2020 Reserve Requirement” means the sum of the 2020 Senior Lien Reserve Requirement and the 2020 Second Lien Reserve Requirement.


(g) “2020 Second Lien New Money Bonds” means those 2020 New Money Bonds, if any, issued as Second Lien Bonds as provided in this 2020 Series Ordinance.


(i) “2020 Second Lien Reserve Requirement” means such amount, if any, as is determined in the Sale Order to be the amount necessary to make the amount on deposit in the Second Lien Bond Reserve Account at least equal to the Reserve Requirement for the Second Lien Bond Reserve Account immediately upon the issuance of the 2020 Second Lien Bonds after taking into consideration such provision as is made for the Reserve Requirement from proceeds of the 2020 Second Lien Bonds and other funds and Credit Facilities on deposit or to be deposited in the Second Lien Bond Reserve Account.

(j) “2020 Senior Lien Bonds” means collectively, the 2020 Senior Lien New Money Bonds and the 2020 Senior Lien Refunding Bonds.

(k) “2020 Senior Lien New Money Bonds” means those 2020 New Money Bonds, if any, issued as Senior Lien Bonds as provided in this 2020 Series Ordinance.

(l) “2020 Senior Lien Refunding Bonds” means those 2020 Refunding Bonds, if any, issued as Senior Lien Bonds as provided in this 2020 Series Ordinance.

(m) “2020 Senior Lien Reserve Requirement” means such amount, if any, as is determined in the Sale Order to be the amount necessary to make the amount on deposit in the Senior Lien Bond Reserve Account at least equal to the Reserve Requirement for the Senior Lien Bond Reserve Account immediately upon the issuance of the 2020 Senior Lien Bonds after taking into consideration such provision as is made for the Reserve Requirement from proceeds of the 2020 Senior Lien Bonds and other funds and Credit Facilities on deposit or to be deposited in the Senior Lien Bond Reserve Account.

(n) “Authorized Denomination” any denomination as determined by an Authorized Officer in the Sale Order.

(o) “Authorized Officer” means either the Chief Executive Officer or the Chief Financial Officer.

(p) “City Authorized Officer” means any officer of DWSD-R designated in a resolution adopted by the Board of Water Commissioners of DWSD-R as authorized to take actions on behalf of the City as described in this 2020 Series Ordinance.
(q) “Continuing Disclosure Undertaking” means the continuing disclosure undertaking or undertakings with respect to the 2020 Bonds to be entered into by the Authority pursuant to the Rule.

(r) “Escrow Agreement” shall have the meaning set forth in Section 12 of this 2020 Series Ordinance.

(s) “Escrow Deposit” means cash or Government Obligations, or a combination of cash and Government Obligations, at least sufficient to discharge the lien of the Pledged Assets securing the Bonds To Be Refunded in accordance with Section 1001 of the Ordinance.

(t) “Fitch” means Fitch Ratings, Inc., and any successor rating agency.

(u) “Interest Payment Date” means except as otherwise determined in the Sale Order each January 1 and July 1, or such other dates and commencing as set forth in the Sale Order.

(v) “Maturity Date” means such dates of maturity of the 2020 Bonds as determined in the Sale Order.

(w) “Moody’s” means Moody’s Investors Service, Inc., and any successor rating agency.

(x) “Official Statement” means the final disclosure document with respect to the 2020 Bonds.

(y) “Person” means any natural person, association, corporation, trust, partnership, joint venture, joint-stock company, municipal corporation, public body or other entity, however organized.

(z) “Preliminary Official Statement” means the preliminary disclosure document with respect to the 2020 Bonds.

(aa) “Project Costs” means the costs of acquiring, constructing, equipping, installing and financing the 2020 Project, including Issuance Costs relating to the 2020 New Money Bonds.

(bb) “Purchase Agreement” means the bond purchase agreement between the Authority and the Underwriter providing for the sale of the 2020 Bonds.

(cc) “Refunding Costs” means the costs of refunding the Bonds To Be Refunded, including, to the extent authorized in the Sale Order, the amount of the Escrow Deposit, and funding the 2020 Reserve Requirement and Issuance Costs relating to the 2020 Refunding Bonds.

(dd) “Regular Record Date” means the fifteenth day of the calendar month immediately preceding an Interest Payment Date.

"S&P" means S&P Global Ratings, and any successor rating agency.

"Sale Order" means any one or more Sale Orders of an Authorized Officer authorizing acts consistent with the Ordinance and this 2020 Series Ordinance necessary and appropriate to complete the sale, execution and delivery of the 2020 Bonds and to complete the other transactions contemplated herein.

"Securities Depository" means (i) The Depository Trust Company and its successors and assigns, if any, or (ii) any other securities depository which agrees to follow the procedures required to be followed by a securities depository in connection with the 2020 Bonds and which is selected by the Authority as provided in Section 6.

"Taxable 2020 Bonds" means any 2020 Bonds other than Tax-Exempt 2020 Bonds.

"Tax-Exempt 2020 Bonds" means any 2020 Bonds that are Tax-Exempt Bonds.

"Underwriter" means Citigroup Global Markets Inc., on behalf of itself and such underwriters as may be named in the Purchase Agreement.


(a) Authorization of Borrowing.

(1) The Authority may borrow (A) an aggregate principal amount not in excess of $415,000,000, in the case of 2020 Refunding Bonds, and (B) an aggregate principal amount not in excess of $100,000,000, in the case of 2020 New Money Bonds, all as is finally determined in the Sale Order, and issue 2020 Bonds at one or more times and in one or more Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2020 Senior Lien Bonds and/or 2020 Second Lien Bonds, all as finally determined in the Sale Order.

(2) The amount of the 2020 New Money Bonds authorized in (1) above shall include the amount of the net original issue premium, if any.

(b) Purpose of 2020 Bonds. The 2020 Bonds shall be issued as Additional Bonds for the purpose of: (1) in the case of 2020 Refunding Bonds, refunding the Bonds To Be Refunded and paying Refunding Costs and (2) in the case of 2020 New Money Bonds, paying, reimbursing and/or refinancing Project Costs, and may in each case include amounts necessary to satisfy the 2020 Reserve Requirement and paying the costs of a Credit Facility.

(c) Limitation on Issuance of 2020 Refunding Bonds. No 2020 Refunding Bonds shall be issued unless:

(1) The proceeds thereof (exclusive of accrued interest), together with other moneys available to the Authority under the Ordinance, are sufficient to provide the Escrow Deposit after payment of the 2020 Reserve Requirement
and Issuance Costs relating to the 2020 Refunding Bonds set forth in the Sale Order.

(2) Concurrently with or prior to the delivery of the 2020 Refunding Bonds, an Authorized Officer gives notice to the Trustee to call for redemption at the applicable redemption price all of the Bonds To Be Refunded on the dates set forth in the Escrow Agreement. In such notice, an Authorized Officer may direct that the notice of redemption to be given by the Trustee to the Holders of the Bonds To Be Refunded pursuant to Section 303 of the Ordinance shall be given prior to the delivery of the 2020 Refunding Bonds and that such notice of redemption be conditioned upon the delivery of the 2020 Refunding Bonds and the funding of the Escrow Deposit. As provided in Section 303 of the Ordinance, if such conditions in the notice of redemption are not satisfied on or before the date fixed for redemption, then the notice of redemption shall be canceled and of no further force or effect.

(d) Insufficient Proceeds. To the extent that proceeds of the 2020 New Money Bonds are insufficient to pay Project Costs, the insufficiency shall be paid from the proceeds of future Additional Bonds, if any, and/or moneys of the Local Water System on hand and legally available therefor, as determined by the Board of Water Commissioners of DWSD-R and, in the case of the issuance of any Additional Bonds, with the concurrence of the Authority Board.

(e) Priority of Lien. The 2020 Bonds shall be issued as Senior Lien Bonds and/or Second Lien Bonds, as set forth in the Sale Order.

(f) Separate Series. The 2020 Bonds are issuable at one or more times and as one or more separate Series of Bonds in such amounts as determined in the Sale Order. The 2020 Refunding Bonds and the 2020 New Money Bonds shall not be included in the same Series and shall be issued as separate Series.

(g) Taxable and Tax-Exempt 2020 Bonds. The 2020 Bonds may be issued as Taxable 2020 Bonds or Tax-Exempt 2020 Bonds, or as separate Series of both, as determined in the Sale Order.

(h) Source of Payment and Security. The 2020 Bonds shall be payable and secured as provided in Section 5.

(i) Applicability of Ordinance. Except as otherwise provided in this 2020 Series Ordinance or the Sale Order, all of the provisions of the Ordinance shall apply to the 2020 Bonds as if set forth in full in this 2020 Series Ordinance, the purpose of this 2020 Series Ordinance being to supplement the Ordinance to authorize the issuance of 2020 Bonds for the purposes set forth herein.
Section 4. **2020 Bond Details.**

(a) **Designation.**

(1) The 2020 Bonds shall bear the designations Water Supply System [Revenue] [Revenue Refunding] [Senior Lien] [Second Lien] Bonds, Series 2020[A/B/C/D] and shall include the Series designation and such other designations, including, without limitation, designations for multiple Series or subseries, as determined by an Authorized Officer as shall be set forth in the Sale Order and not inconsistent with the Ordinance or this 2020 Series Ordinance.

(2) If the 2020 Bonds are not issued in 2020, an Authorized Officer is authorized in his or her discretion to re-designate the year and Series designation of the 2020 Bonds and the various funds and accounts established hereunder to correspond with the year of issuance of the 2020 Bonds. Furthermore, an Authorized Officer is authorized to establish designations within the various funds and accounts established hereunder if necessary in order to differentiate such funds and accounts from other similarly named funds and accounts related to other Bonds.

(b) **Numbering.** 2020 Bonds shall be numbered in such manner as shall be determined in the Sale Order.

(c) **Principal.** 2020 Bonds shall be issued in the form of Serial Bonds or Term Bonds, or any combination of Serial Bonds and Term Bonds, in any Authorized Denomination, and the principal thereof shall mature on July 1, or such other date as set forth in a Sale Order, in such years and amounts, and shall be or not be subject to redemption prior to maturity, all as shall be determined in the Sale Order subject to the limitations applicable to Taxable 2020 Bonds in Section 4(j) hereof and the following limitations:

(1) No 2020 Bonds shall mature later than 40 years after the date of issuance thereof.

(2) 2020 Bonds shall only be issued with principal and interest installments permitted by the Ordinance, including Section 207 thereof.

(d) **Interest.** 2020 Bonds or portions thereof shall bear interest at such fixed rate or rates as determined in the Sale Order not in excess of the maximum rate permitted by law. Interest on 2020 Bonds shall be payable on each Interest Payment Date.

(e) **Payment of Principal and Interest.** The principal of, premium, if any, and interest on the 2020 Bonds shall be payable in lawful money of the United States. The principal of and premium, if any, on the 2020 Bonds are payable upon the surrender thereof at the corporate trust office of the Trustee and the interest is payable by check or draft drawn on the Trustee and mailed to the registered owners as of the immediately preceding Regular Record Date at their address shown on the registration books of the Authority maintained by the Trustee.
(f) **Dating.** The 2020 Bonds shall be dated such date or dates as determined in the Sale Order.

(g) **Reserve Requirement.** The 2020 Reserve Requirement, if any, with respect to each Series of the 2020 Bonds shall be satisfied by a deposit into the appropriate Bond Reserve Account of a portion of the proceeds of such Series of 2020 Bonds, funds already on deposit in the appropriate Bond Reserve Account or the provision of a Credit Facility in the same amount and with a credit rating at the time of issuance of such Series of 2020 Bonds not less than the credit rating of such Series of 2020 Bonds, or any combination of the foregoing. The amounts, if any, required to be deposited in the Senior Lien Bond Reserve Account and the Second Lien Bond Reserve Account to cause the amounts on deposit therein to be at least equal to the Reserve Requirement for the Senior Lien Bonds and the Reserve Requirement for the Second Lien Bonds, respectively, shall be set forth in the Sale Order.

(h) **Exchange.** The registered owner of any 2020 Bond may exchange such 2020 Bond for a new 2020 Bond or Bonds of the same Series, interest rate, maturity and Priority of Lien in an equal aggregate principal amount in one or more of the Authorized Denominations by surrendering such 2020 Bond to be exchanged at the designated office of the Trustee together with an assignment duly executed by the registered owner thereof or his attorney or legal representative in such form as shall be satisfactory to the Trustee. As provided in Section 206 of the Ordinance, the Trustee shall be responsible for the registration, transfer and exchange of 2020 Bonds and shall indicate its acceptance of such duties by a document filed with an Authorized Officer concurrently with the delivery of the 2020 Bonds.

(i) **Execution and Delivery of 2020 Bonds.** The 2020 Bonds shall be executed in the name of the Authority by manual or facsimile signature of the Chief Executive Officer of the Authority and countersigned by the manual or facsimile signature of the Secretary of the Authority Board, and shall have the Authority’s seal, or facsimile thereof, affixed or printed thereon. The Chief Financial Officer is authorized to deliver the 2020 Bonds to the Underwriter upon receiving the purchase price therefor in lawful money of the United States.

(j) **Selection of Taxable 2020 Bonds for Redemption.** Pursuant to Section 303 of the Ordinance, when Taxable 2020 Bonds are to be redeemed in part, an Authorized Officer shall specify to the Trustee the Series designation and maturity of the Taxable 2020 Bonds from which 2020 Bonds or portions of 2020 Bonds to be redeemed shall be selected. Subject to the Authorized Officer’s specification, the particular Taxable 2020 Bonds or portions of Taxable 2020 Bonds to be redeemed will be selected by the Trustee by lot; provided, however, that the Trustee shall select Taxable 2020 Bonds to be redeemed on the basis of a pro rata pass-through distribution of principal in accordance with DTC procedures and provided that, so long as the Taxable 2020 Bonds are held in book-entry form the selection for redemption of such Taxable 2020 Bonds will 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 the basis of a pro-rata pass-through distribution of principal, the Taxable 2020 Bonds will be selected for redemption, in accordance with DTC procedures, by lot. The portion of any Taxable 2020 Bonds to be redeemed in part shall be in the principal amount of $5,000 or any integral multiple thereof.
(k) **Form of 2020 Bonds.** The 2020 Bonds shall be in substantially the following form, subject to such changes, additions or deletions as determined by an Authorized Officer within the parameters of this 2020 Series Ordinance:
R-__

UNITED STATES OF AMERICA
STATE OF MICHIGAN
COUNTIES OF MACOMB, OAKLAND AND WAYNE
GREAT LAKES WATER AUTHORITY

WATER SUPPLY SYSTEM [REVENUE] [REVENUE REFUNDING]
[SENIOR LIEN] [SECOND LIEN] BOND, SERIES 2020__

REGISTERED OWNER:

PRINCIPAL AMOUNT:   $_______________

INTEREST RATE:    ____%  

ORIGINAL ISSUE DATE:

The Great Lakes Water Authority, Counties of Macomb, Oakland and Wayne, State of Michigan (the “Issuer”), upon authorization from the Board of Directors of the Issuer (the “Board”), has issued this Bond. The Issuer, for value received, promises to pay, but only from the Pledged Assets (as defined below), to the Registered Owner named above, or registered assigns, the Principal Amount stated above in lawful money of the United States of America. Interest on this Bond shall accrue from the Original Issue Date set forth above at the Interest Rate per annum set forth above, and shall be payable on _____________ 1, 20__ and semiannually on each July 1 and January 1 thereafter (each an “Interest Payment Date”) in lawful money of the United States of America.

Principal of this Bond is payable upon presentation and surrender at the designated office of U.S. Bank National Association, as Trustee under the Bond Ordinance (as defined below) or such other trustee as the Issuer may hereafter designate by notice mailed to the registered owner not less than 60 days prior to any Interest Payment Date (the “Trustee”).

Interest on this Bond is payable to the registered owner of record as of the close of business on the 15th day of the month immediately preceding any Interest Payment Date as shown on the registration books kept by the Trustee by check or draft mailed by the Trustee to the registered owner at the registered address. Interest on this Bond shall be computed on the basis of a 360-day year comprised of twelve 30-day months.

This Bond is one of a series of bonds designated “Water Supply System Revenue [Refunding] [Senior Lien] [Second Lien] Bonds, Series 2020__” and is issued pursuant to the provisions of (i) Act 233, Public Acts of Michigan, 1955, as amended (“Act 233”), and Act 94, Public Acts of Michigan, 1933, as amended (“Act 94”), (ii) Master Bond Ordinance No. 2015-01 adopted by the Board on October 7, 2015, as amended (the “Bond Ordinance”), (iii) the Series
Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in a Principal Amount not to Exceed $515,000,000, adopted by the Board on __________, 2020 (the “Series Ordinance”), and (vi) a Sale Order of an Authorized Officer of the Issuer dated ____________, 2020 (the “Sale Order,” and, collectively with the Bond Ordinance and the Series Ordinance, the “Ordinance”). This Bond is issued for the purposes set forth in the Series Ordinance and the Sale Order.

For the prompt payment of the principal of and interest on this Bond, and other bonds issued by the Issuer pursuant to the Bond Ordinance, the Issuer has irrevocably pledged the revenues of the Water System (as defined in the Bond Ordinance), after provision is made for reasonable and necessary expenses of operation, maintenance and administration of the Water System (the “Net Revenues”), and a statutory lien on the Net Revenues and Pledged Assets (as defined in the Bond Ordinance) (the “Pledged Assets”) is hereby recognized and acknowledged. Such lien is a [first] [second] lien[, subject to obligations heretofore and hereafter issued or incurred under the Bond Ordinance secured by a first lien on the Pledged Assets]. This Bond is of equal standing on a parity with all other obligations heretofore and hereafter issued or incurred under the Bond Ordinance and secured by a [first] [second] lien on the Pledged Assets.

For a complete statement of the revenues from which and the conditions under which this Bond is payable, a statement of the conditions under which Additional Bonds (as defined in the Bond Ordinance) of senior or equal standing and Additional Bonds of junior standing may hereafter be issued and the general covenants and provisions pursuant to which this Bond is issued, reference is made to the Bond Ordinance.

This Bond is subject to redemption prior to maturity to the extent, and as provided in, the Sale Order.

THIS BOND IS ISSUED UNDER ACT 233 AND ACT 94. IT IS A SELF- LIQUIDATING BOND AND IS NOT A GENERAL OBLIGATION OF THE ISSUER AND DOES NOT CONSTITUTE AN INDEBTEDNESS OF THE ISSUER WITHIN ANY CONSTITUTIONAL OR STATUTORY LIMITATION, BUT IS PAYABLE, BOTH AS TO PRINCIPAL AND INTEREST SOLELY FROM THE PLEDGED ASSETS OF THE WATER SYSTEM. THE PAYMENT OF THE PRINCIPAL OF AND INTEREST ON THIS BOND ARE SECURED BY A STATUTORY LIEN ON THE PLEDGED ASSETS AS DESCRIBED HEREIN.

The Issuer has covenanted and agreed, and hereby covenants and agrees, to fix and maintain, or cause to be fixed and maintained, at all times while any bonds payable from the Pledged Assets of the Water System shall be outstanding, such rates for service furnished by the Water System as shall be sufficient to provide for payment of the interest upon and the principal of this Bond and all other Bonds (as defined in the Bond Ordinance) assumed or issued and to be issued under the Bond Ordinance as and when the same shall become due and payable, to create and maintain a bond redemption fund therefor, including a bond reserve, to provide for the payment of expenses of administration and operation and such expenses for maintenance of the Water System as are necessary to preserve the same in good repair and working order, and to provide for such other expenditures and funds for the Water System, all as are required by the Bond Ordinance.
This Bond is transferable only upon the books of the Issuer kept for that purpose at the office of the Trustee by the registered owner hereof in person, or by his attorney duly authorized in writing, upon the surrender of this Bond together with a written instrument of transfer satisfactory to the Trustee duly executed by the registered owner or his attorney duly authorized in writing, and thereupon a new registered bond or bonds of the same type, in the same aggregate principal amount and of the same maturity shall be issued to the transferee in exchange therefor as provided in the Ordinance and upon the payment of the charges, if any, therein prescribed.

It is hereby certified and recited that all acts, conditions and things required by law precedent to and in the issuance of this Bond have been done and performed by regular and due time and form as required by law.

This Bond is not valid or obligatory for any purpose until the Trustee’s Certificate of Authentication hereon has been executed by the Trustee.

[Remainder of Page Intentionally Left Blank]
IN WITNESS WHEREOF, the Great Lakes Water Authority, Counties of Macomb, Oakland and Wayne, State of Michigan, has caused this Bond to be signed in its name by the facsimile signatures of its Chief Executive Officer and its Secretary of the Board, and its corporate seal to be printed, impressed or otherwise reproduced hereon, all as of the Original Issue Date.

GREAT LAKES WATER AUTHORITY

By: ____________________________________
    Chief Executive Officer

Countersigned:

By: ____________________________________
    Secretary, Board of Directors

[Seal]
CERTIFICATE OF AUTHENTICATION

This Bond is authenticated one of the bonds designated by the Issuer as “Water Supply System [Revenue] [Revenue Refunding] [Senior Lien] [Second Lien] Bonds, Series 2020__”.

U.S. Bank National Association,
Trustee

By: ________________________________

Date of Authentication: ____________, 2020
ASSIGNMENT

For value received, the undersigned sells, assigns and transfers unto __________________________ this Bond and all rights hereunder and hereby irrevocably appoints __________________________ attorney to transfer this Bond on the books kept for registration thereof with full power of substitution in the premises.

Dated: __________________________ __________________________

Signature

NOTICE: The signature to this assignment must correspond with the name as it appears on the face of this Bond in every particular.

END OF BOND FORM
Section 5. Payment of 2020 Bonds; Confirmation of Statutory Lien.

(a) The 2020 Bonds and the interest thereon shall be payable solely from the Pledged Assets.

(b) To secure payment of the 2020 Bonds, the statutory lien upon the whole of the Pledged Assets established by Act 94 and the pledge created in Section 501 of the Ordinance is hereby confirmed in favor of the 2020 Bonds as follows:

(1) Such lien in favor of the 2020 Senior Lien Bonds shall be a first lien of equal standing and Priority of Lien with all issued, to be issued and outstanding Senior Lien Bonds.

(2) Such lien in favor of the 2020 Second Lien Bonds shall be a second lien of equal standing and Priority of Lien with all issued, to be issued and outstanding Second Lien Bonds.

Section 6. Concerning the Securities Depository.

(a) As used herein:

“Beneficial Owner” means any Person who indirectly owns 2020 Bonds pursuant to the indirect ownership system maintained by the Securities Depository and its Participants, commonly known as the “Book-Entry Only System.”

“Participant” means any Person whose ownership of 2020 Bonds is shown on books of the Securities Depository.

(b) Initially, one fully-registered bond for each maturity of each Series of 2020 Bonds, in the aggregate principal amount of such maturity, shall be issued in the name of Cede & Co., as nominee of the Securities Depository, for the benefit of the Participants in the Book-Entry Only System. While the 2020 Bonds are registered in the name of a Securities Depository or its nominee, neither the Authority nor the Trustee shall have any responsibility or obligation to any Participant or to any Beneficial Owner with respect to any matter, including the following:

(1) the accuracy of the records of the Securities Depository, its nominee or any Participant with respect to any ownership interest in 2020 Bonds,

(2) the delivery to any Participant, Beneficial Owner or any other Person other than the Securities Depository of any notice with respect to any 2020 Bonds, including any notice of redemption, or

(3) the payment to any Participant, Beneficial Owner or any other Person, other than the Securities Depository of any amount with respect to the principal (and premium, if any) of or interest on any 2020 Bonds.

(c) The Trustee shall pay all principal (and premium, if any) of and interest on the 2020 Bonds only to or upon the order of the Securities Depository, and all such payments shall be valid
and effective fully to satisfy and discharge the Authority’s obligations with respect to the principal (and premium, if any) of, and interest on such 2020 Bonds to the extent of the sum or sums so paid.

(d) If (1) the Authority receives a written notice from the Securities Depository to the effect the Securities Depository is unable or unwilling to discharge its responsibilities or (2) the Authority determines that it is in the best interests of the Beneficial Owners of 2020 Bonds that they be able to obtain 2020 Bonds in certificated form, then, in either event, the Authority shall notify the Trustee and, in the case of clause, (2), the Securities Depository.

(e) Upon discontinuance of the use of the Book-Entry Only System maintained by the Securities Depository pursuant to subsection (d) above and upon receipt of notice from the Securities Depository containing sufficient information, the Authority shall execute and the Trustee shall authenticate and deliver 2020 Bonds in certificated form to Beneficial Owners in exchange for the beneficial interests of such Beneficial Owners in corresponding principal amounts and in any Authorized Denominations.

(f) Notwithstanding any other provision of this 2020 Series Ordinance to the contrary, so long as any 2020 Bond is registered in the name of the Securities Depository or its nominee:

(1) all payments with respect to the principal, premium, if any, and interest on such 2020 Bond and all notices of redemption, tender and otherwise with respect to such 2020 Bond shall be made and given, respectively, to the Securities Depository as provided in the blanket issuer letter of representations between the Authority and the Securities Depository;

(2) if less than all of the 2020 Bonds of the same type of any maturity are to be redeemed, then the particular 2020 Bonds or portions of 2020 Bonds of such type and maturity to be redeemed shall be selected by the Securities Depository in any such manner as the Securities Depository may determine;

(3) all payments with respect to principal of the 2020 Bonds and premium, if any and interest on the 2020 Bonds shall be made in such manner as shall be prescribed by the Securities Depository; and

(4) if a 2020 Bond is redeemed or tendered in part, then all amounts payable in respect of such redemption or tender shall be paid without presentation and surrender of such 2020 Bond pursuant to the procedures of the Securities Depository.

Section 7. Credit Facility.

(a) An Authorized Officer is authorized to negotiate and obtain a Credit Facility with respect to the 2020 Bonds, if the Authorized Officer determines that it is in the best interest of the Authority. An Authorized Officer is further authorized to renegotiate the terms of any outstanding Credit Facility, if the Authorized Officer determines that it is in the best interest of the Authority.
(b) An Authorized Officer is authorized to pay the cost of any such Credit Facility from the proceeds of the 2020 Bonds or any other funds legally available therefor.

(c) An Authorized Officer is authorized to make such covenants and agreements of the Authority as shall be necessary or appropriate in any agreement with the Credit Entity providing such Credit Facility.

Section 8. Funds and Accounts; Flow of Funds. Except as otherwise provided in this 2020 Series Ordinance, all of the provisions relative to funds and accounts, their maintenance, the flow of funds and other details relative thereto, shall remain as specifically set forth in the Ordinance.

Section 9. Disposition of Proceeds.

(a) 2020 Senior Lien New Money Bonds.

(1) Disposition of Accrued Interest and Capitalized Interest. From the proceeds of the sale of the 2020 Senior Lien New Money Bonds there shall be immediately deposited in the Senior Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2020 Senior Lien New Money Bonds and, to the extent provided in the Sale Order, any capitalized interest on the 2020 Senior Lien New Money Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the Senior Lien Debt Service Account for payment of the next maturing interest payment on the 2020 Senior Lien New Money Bonds.

(2) Senior Lien Bond Reserve Account Deposit. If required as provided in Section 4(g) of this 2020 Series Ordinance, from the proceeds of the 2020 Senior Lien New Money Bonds, there shall next be applied an amount as set forth in the Sale Order to be deposited to the Senior Lien Bond Reserve Account at least equal to the 2020 Senior Lien Reserve Requirement after taking into account any Credit Facility or Credit Facilities to be acquired with the proceeds of the 2020 Senior Lien New Money Bonds or any other funds legally available therefor.

(3) Construction Fund. The balance of the proceeds of the 2020 Senior Lien New Money Bonds shall be deposited in the Detroit Local Construction Account of the Construction Fund and used to pay Project Costs as provided in Section 10.

(b) 2020 Second Lien New Money Bonds.

(1) Disposition of Accrued Interest and Capitalized Interest. From the proceeds of the sale of the 2020 Second Lien New Money Bonds there shall be immediately deposited in the Second Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2020 Second Lien New Money Bonds and, to the extent provided in the Sale
Order, any capitalized interest on the 2020 Second Lien New Money Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the Second Lien Debt Service Account for payment of the next maturing interest payment on the 2020 Second Lien New Money Bonds.

(2) **Second Lien Bond Reserve Account Deposit.** If required as provided in Section 4(g) of this 2020 Series Ordinance, from the proceeds of the 2020 Second Lien New Money Bonds, there shall next be applied an amount as set forth in the Sale Order to be deposited to the Second Lien Bond Reserve Account at least equal to the 2020 Second Lien Reserve Requirement after taking into account any Credit Facility or Credit Facilities to be acquired with the proceeds of the 2020 Second Lien New Money Bonds or any other funds legally available therefor.

(3) **Construction Fund.** The balance of the proceeds of the 2020 Second Lien New Money Bonds shall be deposited in the Detroit Local Construction Account of the Construction Fund and used to pay Project Costs as provided in Section 10.

(c) **2020 Senior Lien Refunding Bonds.**

(1) **Disposition of Accrued Interest:** From the proceeds of the sale of the 2020 Senior Lien Refunding Bonds there shall be immediately deposited in the Senior Lien Bond and Interest Redemption Fund an amount equal to any accrued interest received on the delivery of the 2020 Senior Lien Refunding Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the Senior Lien Bond and Interest Redemption Fund for payment of the next maturing interest payment on the 2020 Senior Lien Refunding Bonds.

(2) **Senior Lien Bond Reserve Account Deposit.** If required as provided in Section 4(g) of this 2020 Series Ordinance, from the proceeds of the 2020 Senior Lien Refunding Bonds, there shall next be applied an amount as set forth in the Sale Order to be deposited to the Senior Lien Bond Reserve Account at least equal to the 2020 Senior Lien Reserve Requirement after taking into account any Credit Facility or Credit Facilities to be acquired with the proceeds of the 2020 Senior Lien Refunding Bonds or any other funds legally available therefor.

(3) **Issuance Costs:** As provided in the Sale Order, a portion of the proceeds from the sale of the 2020 Senior Lien Refunding Bonds shall be applied to the payment of Issuance Costs upon submission of proper documentation to an Authorized Officer.

(4) **Escrow Deposit:** As provided in the Sale Order, the balance of the proceeds from the sale of the 2020 Senior Lien Refunding Bonds shall be used to
acquire Government Obligations, which together with any remaining balance of such proceeds in the form of cash, shall constitute all or part of the Escrow Deposit to be held in the Escrow Fund.

(d) **2020 Second Lien Refunding Bonds.**

(1) **Disposition of Accrued Interest:** From the proceeds of the sale of the 2020 Second Lien Refunding Bonds there shall be immediately deposited in the Second Lien Bond and Interest Redemption Fund an amount equal to any accrued interest received on the delivery of the 2020 Second Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the Second Lien Bond and Interest Redemption Fund for payment of the next maturing interest payment on the 2020 Second Lien Refunding Bonds.

(2) **Second Lien Bond Reserve Account Deposit.** If required as provided in Section 4(g) of this 2020 Series Ordinance, from the proceeds of the 2020 Second Lien Refunding Bonds, there shall next be applied an amount as set forth in the Sale Order to be deposited to the Second Lien Bond Reserve Account at least equal to the 2020 Second Lien Reserve Requirement after taking into account any Credit Facility or Credit Facilities to be acquired with the proceeds of the 2020 Second Lien Refunding Bonds or any other funds legally available therefor.

(3) **Issuance Costs:** As provided in the Sale Order, a portion of the proceeds from the sale of the 2020 Second Lien Refunding Bonds shall be applied to the payment of Issuance Costs upon submission of proper documentation to an Authorized Officer.

(4) **Escrow Deposit:** As provided in the Sale Order, the balance of the proceeds from the sale of the 2020 Second Lien Refunding Bonds shall be used to acquire Government Obligations, which together with any remaining balance of such proceeds in the form of cash, shall constitute all or part of the Escrow Deposit to be held in the Escrow Fund.

Section 10. **Construction Fund.** A subaccount of the Detroit Local Construction Account of the Construction Fund established by the Ordinance shall be established for the 2020 New Money Bonds and designated the “Local Construction Fund, Series 2020,” and shall be established and maintained as a separate depository account with a Custodian as designated by a City Authorized Officer.

(a) Moneys in the Local Construction Fund, Series 2020 shall be applied solely to payment of Project Costs (or to the reimbursement of Project Costs paid by the Authority or the City from other funds prior to the issuance of the 2020 New Money Bonds).

(1) Payments or reimbursement for Project Costs for construction, either on account or otherwise, shall not be made unless the registered engineer in charge of such work shall file with a City Authorized Officer a signed
statement to the effect that the work has been completed in accordance with the plans and specifications therefor, that it was done pursuant to and in accordance with the contract therefor, that such work is satisfactory and that such work has not been previously paid for.

(2) Payment or reimbursement for Project Costs consisting of Issuance Costs and engineering, legal and financial costs shall be made upon submission of appropriate documentation to a City Authorized Officer.

Section 11. Escrow Fund; Escrow Agreement.

(a) Establishment of Escrow Fund. The Escrow Deposit shall be held in or credited to an account designated as the “Great Lakes Water Authority Water Supply System Revenue Bonds Series 2020 Refunding Bonds Escrow Fund” (the “Escrow Fund”) pursuant to an escrow agreement (the “Escrow Agreement”).

(b) Escrow Agreement.

(1) An Authorized Officer is authorized to enter into the Escrow Agreement on behalf of the Authority with U.S. Bank National Association as “Escrow Trustee.”

(2) The Escrow Agreement:

a) shall be in the form and substance customary for refunding escrow agreements;

b) may permit any balance after paying the principal (and premium, if any) and interest on the Bonds To Be Refunded to be applied to any lawful purpose of the Water System if such use will not, in the opinion of Bond Counsel, impair the exclusion of interest on the 2020 Refunding Bonds that are Tax-Exempt 2020 Bonds from gross income for federal income tax purposes; and

c) shall otherwise be in the best interests of the Authority as determined by an Authorized Officer, as conclusively established by his or her execution of the Escrow Agreement.

Section 12. Tax Covenant.

(a) The Authority hereby covenants and represents with the registered owners of the Tax-Exempt 2020 Bonds that so long as any of the Tax-Exempt 2020 Bonds remain outstanding and unpaid as to either principal or interest, the Authority shall, to the extent permitted by law, take all actions within its control to maintain and, in the case of the proceeds of the 2020 New Money Bonds to be deposited in the Local Construction Fund, Series 2020, cause the City to take all actions within its control to maintain, and will refrain from taking any action which would impair and, in the case of the proceeds of the New Money Bonds to be deposited in the Local Construction Fund, Series 2020, cause the City to refrain from taking any action which would
impair, the exclusion of the interest on the Tax-Exempt 2020 Bonds from gross income for federal income tax purposes under the Code.

(b) The actions referred to in subsection (a) above include, but are not limited to, actions relating to any required rebate of arbitrage earnings and the expenditure and investment of proceeds of Tax-Exempt 2020 Bonds and moneys deemed to be proceeds of Tax-Exempt 2020 Bonds, and to prevent the Tax-Exempt 2020 Bonds from being or becoming “private activity bonds” as that term is used in the Code.

Section 13. Preliminary and Final Official Statements.

(a) An Authorized Officer shall assist in the preparation of the Preliminary Official Statement and is authorized to deem the portions of Preliminary Official Statement relating to the 2020 Bonds and the Authority “final” for purposes of the Rule.

(b) The Preliminary Official Statement with such changes and additions as an Authorized Officer shall approve shall constitute the final Official Statement, and an Authorized Officer is authorized to execute the final Official Statement on behalf of the Authority approved by him or her with such changes as the Authorized Officer may authorize.

(c) Such final Preliminary Official Statement and final Official Statement and other offering materials satisfactory to an Authorized Officer are authorized to be distributed by the Underwriter in conjunction with the offering and sale of the 2020 Bonds.

Section 14. Continuing Disclosure. Unless otherwise set forth in the Sale Order because of an exemption from the Rule, the 2020 Bonds shall be subject to the Rule, and an Authorized Officer is authorized to execute and deliver the Continuing Disclosure Undertaking in form and substance customary for continuing disclosure undertakings entered into pursuant to the Rule.

Section 15. Sale of 2020 Bonds; Purchase Agreement.

(a) The 2020 Bonds shall be sold by negotiated sale to the Underwriter pursuant to a Purchase Agreement or Agreements in customary form with such changes thereto as an Authorized Officer shall determine are in the best interests of the Authority, within the parameters established by this 2020 Series Ordinance, and in the case of the 2020 New Money Bonds, in consultation with DWSD-R. Such determination shall be conclusively established by the Authorized Officer’s execution of the Purchase Agreement or Agreements.

(b) The Authority Board hereby determines that the sale of the 2020 Bonds by negotiated sale as described in subsection (a) is in the best interests of the Authority and will allow the 2020 Bonds to be sold in the most efficient manner so as to result in the lowest possible borrowing costs to the Authority.

(c) An Authorized Officer is authorized to accept, on behalf of the Authority, an offer from the Underwriter to purchase the 2020 Bonds subject to the following limitations:

(1) The interest rate coupon with respect to the 2020 Bonds shall not exceed 6.00%.
(2) The purchase price of the 2020 Bonds shall not be less than 98% of the principal amount thereof.

(3) The Underwriter’s discount with respect to the 2020 Bonds or the compensation to be paid to the Underwriter shall not exceed 0.40% of the principal amount of the 2020 Bonds.

(4) The present value of the savings (net of Issuance Costs) to be realized by the issuance of the 2020 Refunding Bonds shall be equal to or greater than 10% of the principal amount of the Bonds To Be Refunded.

(d) An Authorized Officer is authorized to determine if the Purchase Agreement shall provide for liquidated damages and if so, the amount thereof, and if the purchaser of the 2020 Bonds is required to provide a good faith check and if so, the amount thereof.

(e) An Authorized Officer shall confirm in the Sale Order that there was no petition meeting the requirements of Section 33 of Act 94 that was filed with the Secretary of the Authority Board within 45 days of the date of publication of the notice of intent to issue bonds with respect to the 2020 New Money Bonds as required by Section 33 of Act 94.


(a) An Authorized Officer shall make all determinations herein provided to be made in the Sale Order and shall make all such determinations in accordance with the best interests of the Authority within the parameters of this 2020 Series Ordinance, and in the case of determinations with respect to that portion of the 2020 New Money Bonds being issued to finance improvements to the Local Water System, in consultation with DWSD-R.

(b) In addition to determinations authorized elsewhere in this 2020 Series Ordinance, an Authorized Officer shall determine the Bonds To Be Refunded (from the Outstanding DWSD Water Bonds) and aggregate principal amount of 2020 Refunding Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2020 Series Ordinance. An Authorized Officer shall also determine and establish, in accordance with this 2020 Series Ordinance, the maturities of the 2020 Refunding Bonds, whether such maturities shall be serial or term maturities and the Mandatory Redemption Requirements for any term maturities, and the redemption provisions for the 2020 Refunding Bonds.

(c) In addition to determinations authorized elsewhere in this 2020 Series Ordinance, an Authorized Officer shall determine the aggregate principal amount of 2020 New Money Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2020 Series Ordinance, on the basis of his or her evaluation of the maximum amount of 2020 New Money Bonds which can be sold, given anticipated interest rates and the revenue coverage requirements with respect to the 2020 New Money Bonds and for any other reasons the Authorized Officer deems appropriate.

(1) Such determination shall also include the type or types of 2020 New Money Bonds to be issued, whether to issue the 2020 New Money Bonds as Senior
Lien Bonds or Second Lien Bonds and if in one or more Series, and the redemption provisions for the 2020 New Money Bonds.

(2) An Authorized Officer shall also determine and establish, in accordance with this 2020 Series Ordinance, the maturities of the 2020 New Money Bonds, whether such maturities shall be serial or term maturities and the Mandatory Redemption Requirements for any term maturities.

(d) An Authorized Officer is authorized, if necessary, to file applications and to pay the related fees, if any, to the Michigan Department of Treasury at his or her discretion under Act 34 for one or more orders of approval to issue all or a portion of the 2020 Bonds, and such waivers or other Treasury approvals as necessary to implement the sale, delivery and security for the 2020 Bonds as authorized herein, and as required by the Michigan Department of Treasury or Act 34.

(e) An Authorized Officer shall determine in the Sale Order that the requirements set forth in Section 207 of the Ordinance with respect to the issuance of the 2020 Bonds as Additional Bonds have been satisfied.

(f) An Authorized Officer is hereby authorized and directed to do and perform any and all other acts and things with respect to the 2020 Bonds which are necessary or appropriate to carry into effect, consistent with the Ordinance and this 2020 Series Ordinance, the authorizations therein and herein contained including without limitation the securing of ratings by bond rating agencies, and the incurring of reasonable fees costs and expenses incidental to the foregoing, for and on behalf of the Authority.

Section 17. [Reserved.]

Section 18. Ratification. All determinations and decisions of an Authorized Officer heretofore taken with respect to the issuance and sale of the 2020 Bonds as permitted or required by the Ordinance or law are hereby ratified, confirmed and approved.

Section 19. Additional Authorization. The Chief Executive Officer, the Chief Financial Officer, the Chief Administrative and Compliance Officer and the General Counsel of the Authority, any such officials acting in an interim or acting capacity to such officers, their deputies and staff, or any of them, are hereby authorized to execute and deliver such certificates, letters of representation, documents, instruments, opinions and other papers as may be deemed necessary or appropriate to complete the sale, execution and delivery of the 2020 Bonds and otherwise give effect to the transactions contemplated by this 2020 Series Ordinance, as determined by such officials executing and delivering the foregoing items.

Section 20. 2020 Series Ordinance a Contract. The provisions of this 2020 Series Ordinance shall constitute a contract between the Authority and each registered owner of an outstanding 2020 Bond.

(a) Dickinson Wright PLLC is hereby appointed as Bond Counsel for the 2020 Bonds, notwithstanding the periodic representation by Dickinson Wright PLLC in unrelated matters of other parties and potential parties to the issuance of the 2020 Bonds.

(b) PFM Financial Advisors LLC is hereby appointed as Financial Advisor for the 2020 Bonds, notwithstanding the periodic representation by PFM Financial Advisors LLC in unrelated matters of other parties and potential parties to the issuance of the 2020 Bonds.

(c) The fees and expenses of Dickinson Wright PLLC and PFM Financial Advisors LLC shall be payable as an Issuance Cost from the proceeds of the 2020 Bonds or other available funds.

(d) An Authorized Officer is authorized to engage other consultants, including, without limitation, verification agents or other parties as she deems necessary or appropriate in connection with the sale, issuance and delivery of the 2020 Bonds and to pay the fees and expenses thereof from the proceeds of the 2020 Bonds or other available funds.

Section 22. Severability; Headings; and Conflict. If any section, paragraph, clause or provision of this 2020 Series Ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this 2020 Series Ordinance. The section and paragraph headings in this 2020 Series Ordinance are furnished for convenience of reference only and shall not be considered to be part of this 2020 Series Ordinance.

Section 23. Amendments to Ordinance.

(a) Pursuant to Section 1103 of the Ordinance, the Ordinance is amended as follows:

(1) The definition of “Reserve Requirement” in Section 101 of the Ordinance is hereby amended by adding the following to the end of that definition:

“Notwithstanding the foregoing, (i) in the case of Senior Lien Bonds secured by the Senior Lien Bond Reserve Account, upon satisfaction of the conditions set forth in Section 506(e) of this Ordinance, the Reserve Requirement for all Outstanding Senior Lien Bonds secured by the Senior Lien Bond Reserve Account, regardless of when issued, at the election of the Authority set forth in a written notice to the Trustee, may be reduced or eliminated, and if reduced, the reduced Reserve Requirement in no event to be in excess of the maximum permitted by the Code, and (ii) in the case of Second Lien Bonds secured by the Second Lien Bond Reserve Account, upon the satisfaction of the conditions set forth in Section 506(f) of this Ordinance, the Reserve Requirement for all Outstanding Second Lien Bonds secured by the Second Lien Bond Reserve Account, regardless of when issued, at the election of the Authority set forth in a written notice to the Trustee, may be reduced or eliminated, and if reduced, the reduced Reserve Requirement in no event to be in excess of the maximum permitted by the Code.”

(2) A new subsection (e) of Section 506 is added to the Ordinance to read as follows:

“(e) The Authority may elect to reduce or eliminate the Reserve Requirement for all Outstanding Senior Lien Bonds secured by the Senior Lien Bond Reserve Account in accordance

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with the last sentence of the definition of Reserve Requirement in Section 101 at such time as the Authority shall have provided evidence to the Trustee that the Senior Lien Bonds are rated at least Aa3, AA- or AA- by at least two of Moody’s, S&P, and Fitch, respectively, and that neither of such ratings will be reduced solely as a result of the change in the Reserve Requirement for such Senior Lien Bonds. Such election shall be set forth in a written notice to the Trustee and shall be effective on the date of delivery of such notice to the Trustee. Following such election by the Authority, notwithstanding any other provision of this Ordinance, amounts on deposit in the Senior Lien Bond Reserve Account in excess of the Reserve Requirement for the Outstanding Senior Lien Bonds secured by the Senior Lien Bond Reserve Account shall be transferred by the Trustee into the Senior Lien Debt Service Account, the Receiving Fund and/or the Surplus Fund, as directed by the Authority.”

(3) A new subsection (f) of Section 506 is added to the Ordinance to read as follows:

“(f) The Authority may elect to reduce or eliminate the Reserve Requirement for all Outstanding Second Lien Bonds secured by the Second Lien Bond Reserve Account in accordance with the last sentence of the definition of Reserve Requirement in Section 101 at such time as the Authority shall have provided evidence to the Trustee that the Senior Lien Bonds are rated at least Aa3, AA- or AA- by at least two of Moody’s, S&P, and Fitch, respectively, and that neither of such ratings will be reduced solely as a result of the change in the Reserve Requirement for such Second Lien Bonds. Such election shall be set forth in a written notice to the Trustee and shall be effective on the date of delivery of such notice to the Trustee. Following such election by the Authority, notwithstanding any other provision of this Ordinance, amounts on deposit in the Second Lien Bond Reserve Account in excess of the Reserve Requirement for the Outstanding Second Lien Bonds secured by the Second Lien Bond Reserve Account shall be transferred by the Trustee into the Second Lien Debt Service Account, the Receiving Fund and/or the Surplus Fund, as directed by the Authority.”

(b) Pursuant to Section 1103 of the Ordinance, the amendments set forth in this Section 23 shall become effective only upon, (1) in the case of Senior Lien Bonds secured by the Senior Lien Bond Reserve Account, the consent or deemed consent (by purchasing such Senior Lien Bonds where the offering document with respect to such Bonds contains a description of the amendments in paragraphs (1) and (2) of subsection (a) of this Section 23) of the Holders of at least 51% of such Outstanding Senior Lien Bonds, and (2) in the case of Second Lien Bonds secured by the Second Lien Bond Reserve Account, the consent or deemed consent (by purchasing such Second Lien Bonds where the offering document with respect to such Bonds contains a description of the amendments in paragraphs (1) and (3) of subsection (a) of this Section 23) of the Holders of at least 51% of such Outstanding Second Lien Bonds.

Section 24. Publication and Recordation. This 2020 Series Ordinance shall be published in full in the Detroit Legal News, a newspaper of general circulation within the geographic boundaries of the Authority qualified under State law to publish legal notices, promptly after its adoption, and shall be maintained in the official records of the Authority and such recording authenticated by the signatures of the Chairperson and Secretary of the Authority Board.
Section 25. **Repeal.** All ordinances, resolutions, indentures or orders, or parts thereof, in conflict with the provisions of this 2020 Series Ordinance are, to the extent of such conflict, repealed.

Section 26. **Effective Date.** This 2020 Series Ordinance shall be effective upon adoption.

Adopted and signed on the 12th day of February, 2020.

GREAT LAKES WATER AUTHORITY

Signed ________________________________

Chairperson

Signed ________________________________

Secretary
Whereas There has been presented to the Board of Directors of the Great Lakes Water Authority (the “Authority”) an ordinance entitled “Series Ordinance Authorizing the Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in an Amount not to Exceed $515,000,000” (the “2020 Water Series Ordinance”), which ordinance is a Series Ordinance as defined and described in Master Bond Ordinance No. 2015-01 adopted by the Board of Directors on October 7, 2015, as amended on December 9, 2015, January 27, 2016 and August 10, 2016 (as amended, the “Master Water Bond Ordinance”).

Whereas The Articles of Incorporation of the Authority provide that at least 5 of the 6 members of the Authority Board must vote to approve the 2020 Water Series Ordinance.

Now, Therefore Be It:

Resolved That the 2020 Water Series Ordinance, in the form presented to this meeting, is approved and adopted, and the Chairperson and the Secretary are authorized to authenticate the 2020 Water Series Ordinance in the form approved; And Be it Further

Resolved That an affirmative vote of at least 5 members of the Authority Board is necessary for the passage of this Resolution.

Adopted by the Great Lakes Water Authority Board on: February 12, 2020
Date: February 12, 2020

To: Great Lakes Water Authority Audit Committee

From: Jon Wheatley, Public Finance Manager

Re: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Refunding Bonds in an Amount Not to Exceed $800,000,000 (Ordinance 2020-04)

Background: Included is the draft Great Lakes Water Authority (“GLWA”) Board letter for the February 12, 2020 Board meeting regarding the Series Ordinance for the proposed Sewage Disposal System refunding bond issue.

Key Provisions:
- Not to Exceed Par Amount: $800 million
- Maximum Coupon Rate: 6.00%
- Minimum Purchase Price: 98% of principal amount of bonds
- Maximum Underwriter Discount: 0.40% of principal amount of bonds
- Present Value Savings: Equal to or greater than 10.00% of principal amount of bonds to be refunded

Proposed Action: Audit Committee recommends that the Great Lakes Water Authority Board approve the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Refunding Bonds in an Amount Not to Exceed $800,000,000 as presented, at its regular meeting on February 12, 2020.
Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Refunding Bonds in an Amount Not to Exceed $800,000,000 (Ordinance 2020-04)

TO: The Honorable
    Board of Directors
    Great Lakes Water Authority

FROM: Sue F. McCormick
    Chief Executive Officer
    Great Lakes Water Authority

DATE: February 12, 2020

RE: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Refunding Bonds in an Amount Not to Exceed $800,000,000 (Ordinance 2020-04)

MOTION

Upon recommendation of Sue McCormick, Chief Executive Officer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), approve the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Refunding Bonds in an Amount Not to Exceed $800,000,000 as presented, and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.
BACKGROUND

In order for the Great Lakes Water Authority ("GLWA") to proceed with the refunding of various outstanding water supply system bonds for the purpose of achieving annual debt service savings, the GLWA Board must approve the included resolution approving the Series Ordinance. There is no new money as part of this water refunding bond issue.

The Series Ordinance sets forth the guidelines for the New Money and Refunding Bonds and authorizes the Chief Executive Officer of the Chief Financial Officer to execute the final terms of the Bonds, paying issuance costs and signing of the Bond Purchase Agreement, within the parameters set forth in the Series Ordinance.

JUSTIFICATION

The Series Ordinance sets forth the guidelines for the Refunding Bonds and authorizes the Chief Executive Officer of the Chief Financial Officer to execute the final terms of the Bonds, paying issuance costs and signing of the Bond Purchase Agreement, within the parameters set forth in the Series Ordinance. The authorized amount for the Refunding Bonds in Section 3, page 3 is for an aggregate principal amount of not to exceed $800,000,000. The final par amount of the Refunding Bonds will be determined at the time of pricing and is based on current bond market pricing levels, issuance costs and the par amount of the bonds to be refunded as determined by the savings level achieved. While the approval of the resolution gives GLWA the authorization to issue the refunding bonds, GLWA does not have to proceed with the refunding if market conditions become less favorable when it comes time to price the bonds.

Key Provisions:

- Not to Exceed Par Amount: $800 million
- Maximum Coupon Rate: 6.00%
- Minimum Purchase Price: 98% of principal amount of bonds
- Maximum Underwriter Discount: 0.40% of principal amount of bonds
- Present Value Savings: Equal to or greater than 10.00% of principal amount of bonds to be refunded
Additional Provisions:
Similar to the 2016 and 2018 water and sewer bond ordinances approved by the GLWA Board, Ordinance No. 2020-04 also contains the “springing amendment” provision in Section 22- Amendments to Ordinance. As noted on page 21, this section gives GLWA the ability to reduce or eliminate the bond reserve requirement for the senior lien bonds when at least 2 of the 3 national rating agencies rate the senior lien bonds in the AA category, provided that the reduction in the reserve requirement would not negatively affect the outstanding ratings. The amendments will become effective upon the deemed consent of at least 51% of the holders of the outstanding senior lien bonds. GLWA will add this springing amendment to each future series ordinance to obtain the 51% consent level. The currently level of sewer consents achieved is 20.7% for senior lien bonds and 39.6% for second lien bonds, before the issuance of the bonds herein.

BUDGET IMPACT
Savings as a result of the proposed Sewer Refunding Bonds have not been included in the FY 2020 or FY 2021 financial plan. If savings are achieved as a result of the proposed refunding, a budget amendment may be required for FY 2020 and/or FY 2021 depending on the final pricing and savings structure on the bonds.

COMMITTEE REVIEW
This matter was reviewed by the GLWA Audit Committee at its special meeting on February 12, 2020. It is anticipated that the Audit Committee will recommend approve the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Refunding Bonds in an Amount Not to Exceed $800,000,000 as presented.
WHEREAS, pursuant to Resolution No. 2015-10-03 adopted by the Board of Directors of the Great Lakes Water Authority (the “Authority”) on October 7, 2015, the Authority Board approved and adopted Master Bond Ordinance No. 2015-02 (as subsequently amended through the date hereof, the “Ordinance”), which authorizes the issuance by the Authority of Sewage Disposal System Revenue Bonds; and

WHEREAS, the Ordinance authorizes the issuance of such Sewage Disposal System Revenue Bonds in one or more Series pursuant to a Series Ordinance authorizing the issuance and sale of such Series; and

WHEREAS, the Authority Board has determined that it is necessary to authorize at this time one or more Series of Bonds to provide moneys to refund a portion of the Outstanding DWSD Sewer Bonds (the “Bonds To Be Refunded”) and cause the Bonds To Be Refunded to be defeased in accordance with the Ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE GREAT LAKES WATER AUTHORITY AS FOLLOWS:

Section 1. Authority for this Series Ordinance. This Series Ordinance (the “2020 Series Ordinance”) is adopted pursuant to Section 1102(1) of the Ordinance.

Section 2. Definitions. Except as otherwise provided in this 2020 Series Ordinance, all terms which are defined in Section 101 of the Ordinance shall have the same meanings, respectively, in this 2020 Series Ordinance as such terms are given in the Ordinance. In addition, the following terms shall have the following meanings unless the context shall clearly indicate some other meaning:

(a) “2020 Bonds” means the Bonds authorized by Section 3 of this 2020 Series Ordinance.

(b) “2020 Reserve Requirement” means the sum of the 2020 Senior Lien Reserve Requirement and the 2020 Second Lien Reserve Requirement.

(c) “2020 Second Lien Bonds” means those 2020 Bonds, if any, issued as Second Lien Bonds as provided in this 2020 Series Ordinance.

(d) “2020 Second Lien Reserve Requirement” means such amount, if any, as is determined in the Sale Order to be the amount necessary to make the amount on deposit in the Second Lien Bond Reserve Account at least equal to the Reserve Requirement for the Second Lien Bond Reserve Account immediately upon the issuance of the 2020 Second Lien Bonds after taking
into consideration such provision as is made for the Reserve Requirement from proceeds of the 2020 Second Lien Bonds and other funds and Credit Facilities on deposit or to be deposited in the Second Lien Bond Reserve Account.

(e) “2020 Senior Lien Bonds” means those 2020 Bonds, if any, issued as Senior Lien Bonds as provided in this 2020 Series Ordinance.

(f) “2020 Senior Lien Reserve Requirement” means such amount, if any, as is determined in the Sale Order to be the amount necessary to make the amount on deposit in the Senior Lien Bond Reserve Account at least equal to the Reserve Requirement for the Senior Lien Bond Reserve Account immediately upon the issuance of the 2020 Senior Lien Bonds after taking into consideration such provision as is made for the Reserve Requirement from proceeds of the 2020 Senior Lien Bonds and other funds and Credit Facilities on deposit or to be deposited in the Senior Lien Bond Reserve Account.

(g) “Authorized Denomination” any denomination as determined by an Authorized Officer in the Sale Order.

(h) “Authorized Officer” means either the Chief Executive Officer or the Chief Financial Officer.

(i) “Continuing Disclosure Undertaking” means the continuing disclosure undertaking or undertakings with respect to the 2020 Bonds to be entered into by the Authority pursuant to the Rule.

(j) “Escrow Agreement” shall have the meaning set forth in Section 12 of this 2020 Series Ordinance.

(k) “Escrow Deposit” means cash or Government Obligations, or a combination of cash and Government Obligations, at least sufficient to discharge the lien of the Pledged Assets securing the Bonds To Be Refunded in accordance with Section 1001 of the Ordinance.

(l) “Fitch” means Fitch Ratings, Inc., and any successor rating agency.

(m) “Interest Payment Date” means except as otherwise determined in the Sale Order each January 1 and July 1, or such other dates and commencing as set forth in the Sale Order.

(n) “Maturity Date” means such dates of maturity of the 2020 Bonds as determined in the Sale Order.

(o) “Moody’s” means Moody’s Investors Service, Inc., and any successor rating agency.

(p) “Official Statement” means the final disclosure document with respect to the 2020 Bonds.
(q) “Person” means any natural person, association, corporation, trust, partnership, joint venture, joint-stock company, municipal corporation, public body or other entity, however organized.

(r) “Preliminary Official Statement” means the preliminary disclosure document with respect to the 2020 Bonds.

(s) “Purchase Agreement” means the bond purchase agreement between the Authority and the Underwriter providing for the sale of the 2020 Bonds.

(t) “Refunding Costs” means the costs of refunding the Bonds To Be Refunded, including, to the extent authorized in the Sale Order, the amount of the Escrow Deposit, and funding the 2020 Reserve Requirement and Issuance Costs relating to the 2020 Bonds.

(u) “Regular Record Date” means the fifteenth day of the calendar month immediately preceding an Interest Payment Date.


(w) “S&P” means S&P Global Ratings, and any successor rating agency.

(x) “Sale Order” means any one or more Sale Orders of an Authorized Officer authorizing acts consistent with the Ordinance and this 2020 Series Ordinance necessary and appropriate to complete the sale, execution and delivery of the 2020 Bonds and to complete the other transactions contemplated herein.

(y) “Securities Depository” means (i) The Depository Trust Company and its successors and assigns, if any, or (ii) any other securities depository which agrees to follow the procedures required to be followed by a securities depository in connection with the 2020 Bonds and which is selected by the Authority as provided in Section 6.


(bb) “Underwriter” means Citigroup Global Markets Inc., on behalf of itself and such underwriters as may be named in the Purchase Agreement.


(a) Authorization of Borrowing. The Authority may borrow an aggregate principal amount not in excess of $800,000,000, as is finally determined in the Sale Order, and issue 2020 Bonds at one or more times and in one or more Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2020 Senior Lien Bonds and/or 2020 Second Lien Bonds, all as finally determined in the Sale Order.
(b) **Purpose of 2020 Bonds.** The 2020 Bonds shall be issued as Additional Bonds for the purpose of refunding the Bonds To Be Refunded and paying Refunding Costs, and may include amounts necessary to satisfy the 2020 Reserve Requirement and paying the costs of a Credit Facility.

(c) **Limitation on Issuance of 2020 Bonds.** No 2020 Bonds shall be issued unless:

1. The proceeds thereof (exclusive of accrued interest), together with other moneys available to the Authority under the Ordinance, are sufficient to provide the Escrow Deposit after payment of the 2020 Reserve Requirement and Issuance Costs relating to the 2020 Bonds set forth in the Sale Order.

2. Concurrently with or prior to the delivery of the 2020 Bonds, an Authorized Officer gives notice to the Trustee to call for redemption at the applicable redemption price all of the Bonds To Be Refunded on the dates set forth in the Escrow Agreement. In such notice, an Authorized Officer may direct that the notice of redemption to be given by the Trustee to the Holders of the Bonds To Be Refunded pursuant to Section 303 of the Ordinance shall be given prior to the delivery of the 2020 Bonds and that such notice of redemption be conditioned upon the delivery of the 2020 Bonds and the funding of the Escrow Deposit. As provided in Section 303 of the Ordinance, if such conditions in the notice of redemption are not satisfied on or before the date fixed for redemption, then the notice of redemption shall be canceled and of no further force or effect.

(d) **Priority of Lien.** The 2020 Bonds shall be issued as Senior Lien Bonds and/or Second Lien Bonds, as set forth in the Sale Order.

(e) **Separate Series.** The 2020 Bonds are issuable at one or more times and as one or more separate Series of Bonds in such amounts as determined in the Sale Order.

(f) **Taxable and Tax-Exempt 2020 Bonds.** The 2020 Bonds may be issued as Taxable 2020 Bonds or Tax-Exempt 2020 Bonds, or as separate Series of both, as determined in the Sale Order.

(g) **Source of Payment and Security.** The 2020 Bonds shall be payable and secured as provided in Section 5.

(h) **Applicability of Ordinance.** Except as otherwise provided in this 2020 Series Ordinance or the Sale Order, all of the provisions of the Ordinance shall apply to the 2020 Bonds as if set forth in full in this 2020 Series Ordinance, the purpose of this 2020 Series Ordinance being to supplement the Ordinance to authorize the issuance of 2020 Bonds for the purposes set forth herein.
Section 4. 2020 Bond Details.

(a) Designation.

(1) The 2020 Bonds shall bear the designations Sewage Disposal System Revenue Refunding [Senior Lien] [Second Lien] Bonds, Series 2020[A/B/C/D] and shall include the Series designation and such other designations, including, without limitation, designations for multiple Series or subseries, as determined by an Authorized Officer as shall be set forth in the Sale Order and not inconsistent with the Ordinance or this 2020 Series Ordinance.

(2) If the 2020 Bonds are not issued in 2020, an Authorized Officer is authorized in his or her discretion to re-designate the year and Series designation of the 2020 Bonds and the various funds and accounts established hereunder to correspond with the year of issuance of the 2020 Bonds. Furthermore, an Authorized Officer is authorized to establish designations within the various funds and accounts established hereunder if necessary in order to differentiate such funds and accounts from other similarly named funds and accounts related to other Bonds.

(b) Numbering. 2020 Bonds shall be numbered in such manner as shall be determined in the Sale Order.

(c) Principal. 2020 Bonds shall be issued in the form of Serial Bonds or Term Bonds, or any combination of Serial Bonds and Term Bonds, in any Authorized Denomination, and the principal thereof shall mature on July 1, or such other date as set forth in a Sale Order, in such years and amounts, and shall be or not be subject to redemption prior to maturity, all as shall be determined in the Sale Order subject to the limitations applicable to Taxable 2020 Bonds in Section 4(j) hereof and the following limitations:

(1) No 2020 Bonds shall mature later than 40 years after the date of issuance thereof.

(2) 2020 Bonds shall only be issued with principal and interest installments permitted by the Ordinance, including Section 207 thereof.

(d) Interest. 2020 Bonds or portions thereof shall bear interest at such fixed rate or rates as determined in the Sale Order not in excess of the maximum rate permitted by law. Interest on 2020 Bonds shall be payable on each Interest Payment Date.

(e) Payment of Principal and Interest. The principal of, premium, if any, and interest on the 2020 Bonds shall be payable in lawful money of the United States. The principal of and premium, if any, on the 2020 Bonds are payable upon the surrender thereof at the corporate trust office of the Trustee and the interest is payable by check or draft drawn on the Trustee and mailed...
to the registered owners as of the immediately preceding Regular Record Date at their address shown on the registration books of the Authority maintained by the Trustee.

(f) **Dating.** The 2020 Bonds shall be dated such date or dates as determined in the Sale Order.

(g) **Reserve Requirement.** The 2020 Reserve Requirement, if any, with respect to each Series of the 2020 Bonds shall be satisfied by a deposit into the appropriate Bond Reserve Account of a portion of the proceeds of such Series of 2020 Bonds, funds already on deposit in the appropriate Bond Reserve Account or the provision of a Credit Facility in the same amount and with a credit rating at the time of issuance of such Series of 2020 Bonds not less than the credit rating of such Series of 2020 Bonds, or any combination of the foregoing. The amounts, if any, required to be deposited in the Senior Lien Bond Reserve Account and the Second Lien Bond Reserve Account to cause the amounts on deposit therein to be at least equal to the Reserve Requirement for the Senior Lien Bonds and the Reserve Requirement for the Second Lien Bonds, respectively, shall be set forth in the Sale Order.

(h) **Exchange.** The registered owner of any 2020 Bond may exchange such 2020 Bond for a new 2020 Bond or Bonds of the same Series, interest rate, maturity and Priority of Lien in an equal aggregate principal amount in one or more of the Authorized Denominations by surrendering such 2020 Bond to be exchanged at the designated office of the Trustee together with an assignment duly executed by the registered owner thereof or his attorney or legal representative in such form as shall be satisfactory to the Trustee. As provided in Section 206 of the Ordinance, the Trustee shall be responsible for the registration, transfer and exchange of 2020 Bonds and shall indicate its acceptance of such duties by a document filed with an Authorized Officer concurrently with the delivery of the 2020 Bonds.

(i) **Execution and Delivery of 2020 Bonds.** The 2020 Bonds shall be executed in the name of the Authority by manual or facsimile signature of the Chief Executive Officer of the Authority and countersigned by the manual or facsimile signature of the Secretary of the Authority Board, and shall have the Authority’s seal, or facsimile thereof, affixed or printed thereon. The Chief Financial Officer is authorized to deliver the 2020 Bonds to the Underwriter upon receiving the purchase price therefor in lawful money of the United States.

(j) **Selection of Taxable 2020 Bonds for Redemption.** Pursuant to Section 303 of the Ordinance, when Taxable 2020 Bonds are to be redeemed in part, an Authorized Officer shall specify to the Trustee the Series designation and maturity of the Taxable 2020 Bonds from which 2020 Bonds or portions of 2020 Bonds to be redeemed shall be selected. Subject to the Authorized Officer’s specification, the particular Taxable 2020 Bonds or portions of Taxable 2020 Bonds to be redeemed will be selected by the Trustee by lot; provided, however, that the Trustee shall select Taxable 2020 Bonds to be redeemed on the basis of a pro rata pass-through distribution of principal in accordance with DTC procedures and provided that, so long as the Taxable 2020 Bonds are held in book-entry form the selection for redemption of such Taxable 2020 Bonds will 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 the basis of a pro-rata pass-through distribution of principal, the Taxable 2020 Bonds will be selected for redemption, in accordance with DTC
procedures, by lot. The portion of any Taxable 2020 Bonds to be redeemed in part shall be in the principal amount of $5,000 or any integral multiple thereof.

(k) Form of 2020 Bonds. The 2020 Bonds shall be in substantially the following form, subject to such changes, additions or deletions as determined by an Authorized Officer within the parameters of this 2020 Series Ordinance:
UNITED STATES OF AMERICA
STATE OF MICHIGAN
COUNTIES OF MACOMB, OAKLAND AND WAYNE
GREAT LAKES WATER AUTHORITY

SEWAGE DISPOSAL SYSTEM REVENUE REFUNDING
[SENIOR LIEN] [SECOND LIEN] BOND, SERIES 2020__

REGISTERED OWNER:

PRINCIPAL AMOUNT:   $_______________

INTEREST RATE:     _____%

ORIGINAL ISSUE DATE:

The Great Lakes Water Authority, Counties of Macomb, Oakland and Wayne, State of Michigan (the “Issuer”), upon authorization from the Board of Directors of the Issuer (the “Board”), has issued this Bond. The Issuer, for value received, promises to pay, but only from the Pledged Assets (as defined below), to the Registered Owner named above, or registered assigns, the Principal Amount stated above in lawful money of the United States of America. Interest on this Bond shall accrue from the Original Issue Date set forth above at the Interest Rate per annum set forth above, and shall be payable on _____________ 1, 20__ and semiannually on each July 1 and January 1 thereafter (each an “Interest Payment Date”) in lawful money of the United States of America.

Principal of this Bond is payable upon presentation and surrender at the designated office of U.S. Bank National Association, as Trustee under the Bond Ordinance (as defined below) or such other trustee as the Issuer may hereafter designate by notice mailed to the registered owner not less than 60 days prior to any Interest Payment Date (the “Trustee”).

Interest on this Bond is payable to the registered owner of record as of the close of business on the 15th day of the month immediately preceding any Interest Payment Date as shown on the registration books kept by the Trustee by check or draft mailed by the Trustee to the registered owner at the registered address. Interest on this Bond shall be computed on the basis of a 360-day year comprised of twelve 30-day months.

This Bond is one of a series of bonds designated “Sewage Disposal System Revenue Refunding [Senior Lien] [Second Lien] Bonds, Series 2020__” and is issued pursuant to the provisions of (i) Act 233, Public Acts of Michigan, 1955, as amended (“Act 233”), and Act 94, Public Acts of Michigan, 1933, as amended (“Act 94”), (ii) Master Bond Ordinance No. 2015-02 adopted by the Board on October 7, 2015, as amended (the “Bond Ordinance”), (iii) the Series
Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Refunding Bonds in a Principal Amount not to Exceed $800,000,000, adopted by the Board on ________, 2020 (the “Series Ordinance”), and (vi) a Sale Order of an Authorized Officer of the Issuer dated ____________, 2020 (the “Sale Order,” and, collectively with the Bond Ordinance and the Series Ordinance, the “Ordinance”). This Bond is issued for the purposes set forth in the Series Ordinance and the Sale Order.

For the prompt payment of the principal of and interest on this Bond, and other bonds issued by the Issuer pursuant to the Bond Ordinance, the Issuer has irrevocably pledged the revenues of the Sewer System (as defined in the Bond Ordinance), after provision is made for reasonable and necessary expenses of operation, maintenance and administration of the Sewer System (the “Net Revenues”), and a statutory lien on the Net Revenues and Pledged Assets (as defined in the Bond Ordinance) (the “Pledged Assets”) is hereby recognized and acknowledged. Such lien is a [first] [second] lien, subject to obligations heretofore and hereafter issued or incurred under the Bond Ordinance secured by a first lien on the Pledged Assets]. This Bond is of equal standing on a parity with all other obligations heretofore and hereafter issued or incurred under the Bond Ordinance and secured by a [first] [second] lien on the Pledged Assets.

For a complete statement of the revenues from which and the conditions under which this Bond is payable, a statement of the conditions under which Additional Bonds (as defined in the Bond Ordinance) of senior or equal standing and Additional Bonds of junior standing may hereafter be issued and the general covenants and provisions pursuant to which this Bond is issued, reference is made to the Bond Ordinance.

This Bond is subject to redemption prior to maturity to the extent, and as provided in, the Sale Order.

THIS BOND IS ISSUED UNDER ACT 233 AND ACT 94. IT IS A SELF-LIQUIDATING BOND AND IS NOT A GENERAL OBLIGATION OF THE ISSUER AND DOES NOT CONSTITUTE AN INDEBTEDNESS OF THE ISSUER WITHIN ANY CONSTITUTIONAL OR STATUTORY LIMITATION, BUT IS PAYABLE, BOTH AS TO PRINCIPAL AND INTEREST SOLELY FROM THE PLEDGED ASSETS OF THE SEWER SYSTEM. THE PAYMENT OF THE PRINCIPAL OF AND INTEREST ON THIS BOND ARE SECURED BY A STATUTORY LIEN ON THE PLEDGED ASSETS AS DESCRIBED HEREIN.

The Issuer has covenanted and agreed, and hereby covenants and agrees, to fix and maintain, or cause to be fixed and maintained, at all times while any bonds payable from the Pledged Assets of the Sewer System shall be outstanding, such rates for service furnished by the Sewer System as shall be sufficient to provide for payment of the interest upon and the principal of this Bond and all other Bonds (as defined in the Bond Ordinance) assumed or issued and to be issued under the Bond Ordinance as and when the same shall become due and payable, to create and maintain a bond redemption fund therefor, including a bond reserve, to provide for the payment of expenses of administration and operation and such expenses for maintenance of the Sewer System as are necessary to preserve the same in good repair and working order, and to provide for such other expenditures and funds for the Sewer System, all as are required by the Bond Ordinance.
This Bond is transferable only upon the books of the Issuer kept for that purpose at the office of the Trustee by the registered owner hereof in person, or by his attorney duly authorized in writing, upon the surrender of this Bond together with a written instrument of transfer satisfactory to the Trustee duly executed by the registered owner or his attorney duly authorized in writing, and thereupon a new registered bond or bonds of the same type, in the same aggregate principal amount and of the same maturity shall be issued to the transferee in exchange therefor as provided in the Ordinance and upon the payment of the charges, if any, therein prescribed.

It is hereby certified and recited that all acts, conditions and things required by law precedent to and in the issuance of this Bond have been done and performed by regular and due time and form as required by law.

This Bond is not valid or obligatory for any purpose until the Trustee’s Certificate of Authentication hereon has been executed by the Trustee.

[Remainder of Page Intentionally Left Blank]
IN WITNESS WHEREOF, the Great Lakes Water Authority, Counties of Macomb, Oakland and Wayne, State of Michigan, has caused this Bond to be signed in its name by the facsimile signatures of its Chief Executive Officer and its Secretary of the Board, and its corporate seal to be printed, impressed or otherwise reproduced hereon, all as of the Original Issue Date.

GREAT LAKES WATER AUTHORITY

By: ___________________________________
    Chief Executive Officer

Countersigned:

By: ___________________________________
    Secretary, Board of Directors

[Seal]
CERTIFICATE OF AUTHENTICATION

This Bond is authenticated one of the bonds designated by the Issuer as “Sewage Disposal System Revenue Refunding [Senior Lien] [Second Lien] Bonds, Series 2020__”.

U.S. Bank National Association,
Trustee

By:______________________________

Date of Authentication: ____________, 2020
ASSIGNMENT

For value received, the undersigned sells, assigns and transfers unto __________________________ this Bond and all rights hereunder and hereby irrevocably appoints __________________________ attorney to transfer this Bond on the books kept for registration thereof with full power of substitution in the premises.

Dated: __________________________  __________________________

Signature

NOTICE: The signature to this assignment must correspond with the name as it appears on the face of this Bond in every particular.

END OF BOND FORM
Section 5. Payment of 2020 Bonds; Confirmation of Statutory Lien.

(a) The 2020 Bonds and the interest thereon shall be payable solely from the Pledged Assets.

(b) To secure payment of the 2020 Bonds, the statutory lien upon the whole of the Pledged Assets established by Act 94 and the pledge created in Section 501 of the Ordinance is hereby confirmed in favor of the 2020 Bonds as follows:

   (1) Such lien in favor of the 2020 Senior Lien Bonds shall be a first lien of equal standing and Priority of Lien with all issued, to be issued and outstanding Senior Lien Bonds.

   (2) Such lien in favor of the 2020 Second Lien Bonds shall be a second lien of equal standing and Priority of Lien with all issued, to be issued and outstanding Second Lien Bonds.

Section 6. Concerning the Securities Depository.

(a) As used herein:

   “Beneficial Owner” means any Person who indirectly owns 2020 Bonds pursuant to the indirect ownership system maintained by the Securities Depository and its Participants, commonly known as the “Book-Entry Only System.”

   “Participant” means any Person whose ownership of 2020 Bonds is shown on books of the Securities Depository.

(b) Initially, one fully-registered bond for each maturity of each Series of 2020 Bonds, in the aggregate principal amount of such maturity, shall be issued in the name of Cede & Co., as nominee of the Securities Depository, for the benefit of the Participants in the Book-Entry Only System. While the 2020 Bonds are registered in the name of a Securities Depository or its nominee, neither the Authority nor the Trustee shall have any responsibility or obligation to any Participant or to any Beneficial Owner with respect to any matter, including the following:

   (1) the accuracy of the records of the Securities Depository, its nominee or any Participant with respect to any ownership interest in 2020 Bonds,

   (2) the delivery to any Participant, Beneficial Owner or any other Person other than the Securities Depository of any notice with respect to any 2020 Bonds, including any notice of redemption, or

   (3) the payment to any Participant, Beneficial Owner or any other Person, other than the Securities Depository of any amount with respect to the principal (and premium, if any) of or interest on any 2020 Bonds.

(c) The Trustee shall pay all principal (and premium, if any) of and interest on the 2020 Bonds only to or upon the order of the Securities Depository, and all such payments shall be valid
and effective fully to satisfy and discharge the Authority’s obligations with respect to the principal (and premium, if any) of, and interest on such 2018 Bonds to the extent of the sum or sums so paid.

(d) If (1) the Authority receives a written notice from the Securities Depository to the effect the Securities Depository is unable or unwilling to discharge its responsibilities or (2) the Authority determines that it is in the best interests of the Beneficial Owners of 2020 Bonds that they be able to obtain 2020 Bonds in certificated form, then, in either event, the Authority shall notify the Trustee and, in the case of clause, (2), the Securities Depository.

(e) Upon discontinuance of the use of the Book-Entry Only System maintained by the Securities Depository pursuant to subsection (d) above and upon receipt of notice from the Securities Depository containing sufficient information, the Authority shall execute and the Trustee shall authenticate and deliver 2020 Bonds in certificated form to Beneficial Owners in exchange for the beneficial interests of such Beneficial Owners in corresponding principal amounts and in any Authorized Denominations.

(f) Notwithstanding any other provision of this 2020 Series Ordinance to the contrary, so long as any 2020 Bond is registered in the name of the Securities Depository or its nominee:

(1) all payments with respect to the principal, premium, if any, and interest on such 2020 Bond and all notices of redemption, tender and otherwise with respect to such 2020 Bond shall be made and given, respectively, to the Securities Depository as provided in the blanket issuer letter of representations between the Authority and the Securities Depository;

(2) if less than all of the 2020 Bonds of the same type of any maturity are to be redeemed, then the particular 2020 Bonds or portions of 2020 Bonds of such type and maturity to be redeemed shall be selected by the Securities Depository in any such manner as the Securities Depository may determine;

(3) all payments with respect to principal of the 2020 Bonds and premium, if any and interest on the 2020 Bonds shall be made in such manner as shall be prescribed by the Securities Depository; and

(4) if a 2020 Bond is redeemed or tendered in part, then all amounts payable in respect of such redemption or tender shall be paid without presentation and surrender of such 2020 Bond pursuant to the procedures of the Securities Depository.

Section 7. Credit Facility.

(a) An Authorized Officer is authorized to negotiate and obtain a Credit Facility with respect to the 2020 Bonds, if the Authorized Officer determines that it is in the best interest of the Authority. An Authorized Officer is further authorized to renegotiate the terms of any outstanding Credit Facility, if the Authorized Officer determines that it is in the best interest of the Authority.
(b) An Authorized Officer is authorized to pay the cost of any such Credit Facility from the proceeds of the 2020 Bonds or any other funds legally available therefor.

(c) An Authorized Officer is authorized to make such covenants and agreements of the Authority as shall be necessary or appropriate in any agreement with the Credit Entity providing such Credit Facility.

Section 8. Funds and Accounts; Flow of Funds. Except as otherwise provided in this 2020 Series Ordinance, all of the provisions relative to funds and accounts, their maintenance, the flow of funds and other details relative thereto, shall remain as specifically set forth in the Ordinance.

Section 9. Disposition of Proceeds.

(a) 2020 Senior Lien Bonds.

(1) Disposition of Accrued Interest: From the proceeds of the sale of the 2020 Senior Lien Bonds there shall be immediately deposited in the Senior Lien Bond and Interest Redemption Fund an amount equal to any accrued interest received on the delivery of the 2020 Senior Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the Senior Lien Bond and Interest Redemption Fund for payment of the next maturing interest payment on the 2020 Senior Lien Bonds.

(2) Senior Lien Bond Reserve Account Deposit. If required as provided in Section 4(g) of this 2020 Series Ordinance, from the proceeds of the 2018 Senior Lien Bonds, there shall next be applied an amount as set forth in the Sale Order to be deposited to the Senior Lien Bond Reserve Account at least equal to the 2020 Senior Lien Reserve Requirement after taking into account any Credit Facility or Credit Facilities to be acquired with the proceeds of the 2020 Senior Lien Bonds or any other funds legally available therefor.

(3) Issuance Costs: As provided in the Sale Order, a portion of the proceeds from the sale of the 2020 Senior Lien Bonds shall be applied to the payment of Issuance Costs upon submission of proper documentation to an Authorized Officer.

(4) Escrow Deposit: As provided in the Sale Order, the balance of the proceeds from the sale of the 2020 Senior Lien Bonds shall be used to acquire Government Obligations, which together with any remaining balance of such proceeds in the form of cash, shall constitute all or part of the Escrow Deposit to be held in the Escrow Fund.

(b) 2020 Second Lien Bonds.
(1) **Disposition of Accrued Interest:** From the proceeds of the sale of the 2020 Second Lien Bonds there shall be immediately deposited in the Second Lien Bond and Interest Redemption Fund an amount equal to any accrued interest received on the delivery of the 2020 Second Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the Second Lien Bond and Interest Redemption Fund for payment of the next maturing interest payment on the 2020 Second Lien Bonds.

(2) **Second Lien Bond Reserve Account Deposit.** If required as provided in Section 4(g) of this 2020 Series Ordinance, from the proceeds of the 2020 Second Lien Bonds, there shall next be applied an amount as set forth in the Sale Order to be deposited to the Second Lien Bond Reserve Account at least equal to the 2020 Second Lien Reserve Requirement after taking into account any Credit Facility or Credit Facilities to be acquired with the proceeds of the 2020 Second Lien Bonds or any other funds legally available therefor.

(3) **Issuance Costs:** As provided in the Sale Order, a portion of the proceeds from the sale of the 2020 Second Lien Bonds shall be applied to the payment of Issuance Costs upon submission of proper documentation to an Authorized Officer.

(4) **Escrow Deposit:** As provided in the Sale Order, the balance of the proceeds from the sale of the 2020 Second Lien Bonds shall be used to acquire Government Obligations, which together with any remaining balance of such proceeds in the form of cash, shall constitute all or part of the Escrow Deposit to be held in the Escrow Fund.

Section 10. **Escrow Fund; Escrow Agreement.**

(a) **Establishment of Escrow Fund.** The Escrow Deposit shall be held in or credited to an account designated as the “Great Lakes Water Authority Sewage Disposal System Revenue Bonds Series 2020 Refunding Bonds Escrow Fund” (the “Escrow Fund”) pursuant to an escrow agreement (the “Escrow Agreement”).

(b) **Escrow Agreement.**

(1) An Authorized Officer is authorized to enter into the Escrow Agreement on behalf of the Authority with U.S. Bank National Association as “Escrow Trustee.”

(2) The Escrow Agreement:

a) shall be in the form and substance customary for refunding escrow agreements;
b) may permit any balance after paying the principal (and premium, if any) and interest on the Bonds To Be Refunded to be applied to any lawful purpose of the Sewer System if such use will not, in the opinion of Bond Counsel, impair the exclusion of interest on the 2020 Bonds that are Tax-Exempt 2020 Bonds from gross income for federal income tax purposes; and

c) shall otherwise be in the best interests of the Authority as determined by an Authorized Officer, as conclusively established by his or her execution of the Escrow Agreement.

Section 11. **Tax Covenant.**

(a) The Authority hereby covenants and represents with the registered owners of the Tax-Exempt 2020 Bonds that so long as any of the Tax-Exempt 2020 Bonds remain outstanding and unpaid as to either principal or interest, the Authority shall, to the extent permitted by law, take all actions within its control to maintain and will refrain from taking any action which would impair the exclusion of the interest on the Tax-Exempt 2020 Bonds from gross income for federal income tax purposes under the Code.

(b) The actions referred to in subsection (a) above include, but are not limited to, actions relating to any required rebate of arbitrage earnings and the expenditure and investment of proceeds of Tax-Exempt 2020 Bonds and moneys deemed to be proceeds of Tax-Exempt 2020 Bonds, and to prevent the Tax-Exempt 2020 Bonds from being or becoming “private activity bonds” as that term is used in the Code.

Section 12. **Preliminary and Final Official Statements.**

(a) An Authorized Officer shall assist in the preparation of the Preliminary Official Statement and is authorized to deem the portions of Preliminary Official Statement relating to the 2020 Bonds and the Authority “final” for purposes of the Rule.

(b) The Preliminary Official Statement with such changes and additions as an Authorized Officer shall approve shall constitute the final Official Statement, and an Authorized Officer is authorized to execute the final Official Statement on behalf of the Authority approved by him or her with such changes as the Authorized Officer may authorize.

(c) Such final Preliminary Official Statement and final Official Statement and other offering materials satisfactory to an Authorized Officer are authorized to be distributed by the Underwriter in conjunction with the offering and sale of the 2020 Bonds.

Section 13. **Continuing Disclosure.** Unless otherwise set forth in the Sale Order because of an exemption from the Rule, the 2020 Bonds shall be subject to the Rule, and an Authorized Officer is authorized to execute and deliver the Continuing Disclosure Undertaking in form and substance customary for continuing disclosure undertakings entered into pursuant to the Rule.

Section 14. **Sale of 2020 Bonds; Purchase Agreement.**
(a) The 2020 Bonds shall be sold by negotiated sale to the Underwriter pursuant to a Purchase Agreement or Agreements in customary form with such changes thereto as an Authorized Officer shall determine are in the best interests of the Authority, within the parameters established by this 2020 Series Ordinance. Such determination shall be conclusively established by the Authorized Officer’s execution of the Purchase Agreement or Agreements.

(b) The Authority Board hereby determines that the sale of the 2020 Bonds by negotiated sale as described in subsection (a) is in the best interests of the Authority and will allow the 2020 Bonds to be sold in the most efficient manner so as to result in the lowest possible borrowing costs to the Authority.

(c) An Authorized Officer is authorized to accept, on behalf of the Authority, an offer from the Underwriter to purchase the 2020 Bonds subject to the following limitations:

1. The interest rate coupon with respect to the 2020 Bonds shall not exceed 6.00%.

2. The purchase price of the 2020 Bonds shall not be less than 98% of the principal amount thereof.

3. The Underwriter’s discount with respect to the 2020 Bonds or the compensation to be paid to the Underwriter shall not exceed 0.40% of the principal amount of the 2020 Bonds.

4. The present value of the savings (net of Issuance Costs) to be realized by the issuance of the 2020 Bonds shall be equal to or greater than 10% of the principal amount of the Bonds To Be Refunded.

(d) An Authorized Officer is authorized to determine if the Purchase Agreement shall provide for liquidated damages and if so, the amount thereof, and if the purchaser of the 2020 Bonds is required to provide a good faith check and if so, the amount thereof.

Section 15. Delegation of Authority to and Authorization of Actions of Authorized Officers.

(a) An Authorized Officer shall make all determinations herein provided to be made in the Sale Order and shall make all such determinations in accordance with the best interests of the Authority within the parameters of this 2020 Series Ordinance.

(b) In addition to determinations authorized elsewhere in this 2020 Series Ordinance, an Authorized Officer shall determine the Bonds To Be Refunded (from the Outstanding DWSD Sewer Bonds) and aggregate principal amount of 2020 Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2020 Series Ordinance. An Authorized Officer shall also determine and establish, in accordance with this 2020 Series Ordinance, the maturities of the 2020 Bonds, whether such maturities shall be serial or term maturities and the Mandatory Redemption Requirements for any term maturities, and the redemption provisions for the 2020 Bonds.
(c) An Authorized Officer is authorized, if necessary, to file applications and to pay the related fees, if any, to the Michigan Department of Treasury at his or her discretion under Act 34 for one or more orders of approval to issue all or a portion of the 2020 Bonds, and such waivers or other Treasury approvals as necessary to implement the sale, delivery and security for the 2020 Bonds as authorized herein, and as required by the Michigan Department of Treasury or Act 34.

(d) An Authorized Officer shall determine in the Sale Order that the requirements set forth in Section 207 of the Ordinance with respect to the issuance of the 2020 Bonds as Additional Bonds have been satisfied.

(e) An Authorized Officer is hereby authorized and directed to do and perform any and all other acts and things with respect to the 2020 Bonds which are necessary or appropriate to carry into effect, consistent with the Ordinance and this 2020 Series Ordinance, the authorizations therein and herein contained including without limitation the securing of ratings by bond rating agencies, and the incurring of reasonable fees costs and expenses incidental to the foregoing, for and on behalf of the Authority.

Section 16. [Reserved.]

Section 17. Ratification. All determinations and decisions of an Authorized Officer heretofore taken with respect to the issuance and sale of the 2020 Bonds as permitted or required by the Ordinance or law are hereby ratified, confirmed and approved.

Section 18. Additional Authorization. The Chief Executive Officer, the Chief Financial Officer, the Chief Administrative and Compliance Officer and the General Counsel of the Authority, any such officials acting in an interim or acting capacity to such officers, their deputies and staff, or any of them, are hereby authorized to execute and deliver such certificates, letters of representation, documents, instruments, opinions and other papers as may be deemed necessary or appropriate to complete the sale, execution and delivery of the 2020 Bonds and otherwise give effect to the transactions contemplated by this 2020 Series Ordinance, as determined by such officials executing and delivering the foregoing items.

Section 19. 2020 Series Ordinance a Contract. The provisions of this 2020 Series Ordinance shall constitute a contract between the Authority and each registered owner of an outstanding 2020 Bond.

Section 20. Professional Services.

(a) Dickinson Wright PLLC is hereby appointed as Bond Counsel for the 2020 Bonds, notwithstanding the periodic representation by Dickinson Wright PLLC in unrelated matters of other parties and potential parties to the issuance of the 2020 Bonds.

(b) PFM Financial Advisors LLC is hereby appointed as Financial Advisor for the 2020 Bonds, notwithstanding the periodic representation by PFM Financial Advisors LLC in unrelated matters of other parties and potential parties to the issuance of the 2020 Bonds.
(c) The fees and expenses of Dickinson Wright PLLC and PFM Financial Advisors LLC shall be payable as an Issuance Cost from the proceeds of the 2020 Bonds or other available funds.

(d) An Authorized Officer is authorized to engage other consultants, including, without limitation, verification agents or other parties as she deems necessary or appropriate in connection with the sale, issuance and delivery of the 2020 Bonds and to pay the fees and expenses thereof from the proceeds of the 2020 Bonds or other available funds.

Section 21. Severability; Headings; and Conflict. If any section, paragraph, clause or provision of this 2020 Series Ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this 2020 Series Ordinance. The section and paragraph headings in this 2020 Series Ordinance are furnished for convenience of reference only and shall not be considered to be part of this 2020 Series Ordinance.

Section 22. Amendments to Ordinance.

(a) Pursuant to Section 1103 of the Ordinance, the Ordinance is amended as follows:

(1) The definition of “Reserve Requirement” in Section 101 of the Ordinance is hereby amended by adding the following to the end of that definition:

“Notwithstanding the foregoing, (i) in the case of Senior Lien Bonds secured by the Senior Lien Bond Reserve Account, upon satisfaction of the conditions set forth in Section 506(e) of this Ordinance, the Reserve Requirement for all Outstanding Senior Lien Bonds secured by the Senior Lien Bond Reserve Account, regardless of when issued, at the election of the Authority set forth in a written notice to the Trustee, may be reduced or eliminated, and if reduced, the reduced Reserve Requirement in no event to be in excess of the maximum permitted by the Code, and (ii) in the case of Second Lien Bonds secured by the Second Lien Bond Reserve Account, upon the satisfaction of the conditions set forth in Section 506(f) of this Ordinance, the Reserve Requirement for all Outstanding Second Lien Bonds secured by the Second Lien Bond Reserve Account, regardless of when issued, at the election of the Authority set forth in a written notice to the Trustee, may be reduced or eliminated, and if reduced, the reduced Reserve Requirement in no event to be in excess of the maximum permitted by the Code.”

(2) A new subsection (e) of Section 506 is added to the Ordinance to read as follows:

“(e) The Authority may elect to reduce or eliminate the Reserve Requirement for all Outstanding Senior Lien Bonds secured by the Senior Lien Bond Reserve Account in accordance with the last sentence of the definition of Reserve Requirement in Section 101 at such time as the Authority shall have provided evidence to the Trustee that the Senior Lien Bonds are rated at least Aa3, AA- or AA- by at least two of Moody’s, S&P, and Fitch, respectively, and that neither of such ratings will be reduced solely as a result of the change in the Reserve Requirement for such Senior Lien Bonds. Such election shall be set forth in a written notice to the Trustee and shall be effective on the date of delivery of such notice to the Trustee. Following such election by the Authority, notwithstanding any other provision of this Ordinance, amounts on deposit in the Senior Lien Bond Reserve Account in excess of the Reserve Requirement for the Outstanding Senior Lien
Bonds secured by the Senior Lien Bond Reserve Account shall be transferred by the Trustee into the Senior Lien Debt Service Account, the Receiving Fund and/or the Surplus Fund, as directed by the Authority.”

(3) A new subsection (f) of Section 506 is added to the Ordinance to read as follows:

“(f) The Authority may elect to reduce or eliminate the Reserve Requirement for all Outstanding Second Lien Bonds secured by the Second Lien Bond Reserve Account in accordance with the last sentence of the definition of Reserve Requirement in Section 101 at such time as the Authority shall have provided evidence to the Trustee that the Senior Lien Bonds are rated at least Aa3, AA- or AA- by at least two of Moody’s, S&P, and Fitch, respectively, and that neither of such ratings will be reduced solely as a result of the change in the Reserve Requirement for such Second Lien Bonds. Such election shall be set forth in a written notice to the Trustee and shall be effective on the date of delivery of such notice to the Trustee. Following such election by the Authority, notwithstanding any other provision of this Ordinance, amounts on deposit in the Second Lien Bond Reserve Account in excess of the Reserve Requirement for the Outstanding Second Lien Bonds secured by the Second Lien Bond Reserve Account shall be transferred by the Trustee into the Second Lien Debt Service Account, the Receiving Fund and/or the Surplus Fund, as directed by the Authority.”

(b) Pursuant to Section 1103 of the Ordinance, the amendments set forth in this Section 22 shall become effective only upon, (1) in the case of Senior Lien Bonds secured by the Senior Lien Bond Reserve Account, the consent or deemed consent (by purchasing such Senior Lien Bonds where the offering document with respect to such Bonds contains a description of the amendments in paragraphs (1) and (2) of subsection (a) of this Section 22) of the Holders of at least 51% of such Outstanding Senior Lien Bonds, and (2) in the case of Second Lien Bonds secured by the Second Lien Bond Reserve Account, the consent or deemed consent (by purchasing such Second Lien Bonds where the offering document with respect to such Bonds contains a description of the amendments in paragraphs (1) and (3) of subsection (a) of this Section 22) of the Holders of at least 51% of such Outstanding Second Lien Bonds.

Section 23. Publication and Recordation. This 2020 Series Ordinance shall be published in full in the Detroit Legal News, a newspaper of general circulation within the geographic boundaries of the Authority qualified under State law to publish legal notices, promptly after its adoption, and shall be maintained in the official records of the Authority and such recording authenticated by the signatures of the Chairperson and Secretary of the Authority Board.

Section 24. Repeal. All ordinances, resolutions, indentures or orders, or parts thereof, in conflict with the provisions of this 2020 Series Ordinance are, to the extent of such conflict, repealed.

Section 25. Effective Date. This 2020 Series Ordinance shall be effective upon adoption.
Adopted and signed on the 12th day of February, 2020.

GREAT LAKES WATER AUTHORITY

Signed ________________________________
Chairperson

Signed ________________________________
Secretary
Great Lakes Water Authority
Resolution 2020-050

RE: Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Refunding Bonds in an Amount not to Exceed $800,000,000
Ordinance 2020-04

By Board Member: _____________________________________________________________

Whereas There has been presented to the Board of Directors of the Great Lakes Water Authority (the “Authority”) an ordinance entitled “Series Ordinance Authorizing the Issuance and Sale of Sewage Disposal System Revenue Refunding Bonds in an Amount not to Exceed $800,000,000” (the “2020 Sewer Series Ordinance”), which ordinance is a Series Ordinance as defined and described in Master Bond Ordinance No. 2015-02 adopted by the Board of Directors on October 7, 2015, as amended on December 9, 2015, January 27, 2016 and August 10, 2016 (as amended, the “Master Sewer Bond Ordinance”).

Whereas The Articles of Incorporation of the Authority provide that at least 5 of the 6 members of the Authority Board must vote to approve the 2020 Sewer Series Ordinance.

Now, Therefore Be It:

Resolved That the 2020 Sewer Series Ordinance, in the form presented to this meeting, is approved and adopted, and the Chairperson and the Secretary are authorized to authenticate the 2020 Sewer Series Ordinance in the form approved; And Be it Further

Resolved That an affirmative vote of at least 5 members of the Authority Board is necessary for the passage of this Resolution.

Adopted by the Great Lakes Water Authority Board on: February 12, 2020