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TO: Board of Directors – Great Lakes Water Authority
Great Lakes Water Authority Administration

FROM: Bob Daddow, GLWA Board Director *Daddow*

SUBJECT: Current and Legacy Business Issues Facing GLWA

DATE: January 8, 2018

Attached is a listing of current and legacy business issues ('business issues') facing the Great Lakes Water Authority (GLWA) Board of Directors and Administration as GLWA enters calendar 2018. Many of the business issues were presently discussed with a group formed to amend the Lease and / or Shared Services Agreements and have been known since the launch of GLWA on January 1, 2016. Business issues satisfactorily resolved over the past two years were omitted from this current listing. This business listing has been maintained to ensure that I remember to periodically inquire as to the status of these issues, that they do not get lost over time, and ultimately are resolved.

As required by the Statement Auditing Standards No. 114, the auditors of GLWA's financial statements must make inquiries of GLWA Administration, Board of Directors and others of known business issues, internal control weaknesses and / or other issues that might provide added audit risk on their scope of work absent their knowledge.

As you may know, I had a rather extensive meeting lasting roughly two and a half hours with representatives of the audit firm in late November 2017 on an earlier version of the attached business issues listing so as to comply with my responsibilities under SAS No. 114. The impact on the auditor's scope of work and how they addressed these issues, if at all, is unknown at this time. As they complete their audit work involving GLWA's financial statements, inquiries will be made of the auditors as to how the issues were addressed during the audit work and how the presentation of the audited financial statements might have reflected these issues.

The current business issues as noted are based upon my understanding of the issue as of this writing. I am aware of discussions underway between DWSD-R and GLWA Administrations that might result in a required update of this document due to these discussions. For my purposes, the attached is a 'living' document periodically updated as the issues evolve over time and become known to me.

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CURRENT AND LEGACY BUSINESS ISSUES

GREAT LAKES WATER AUTHORITY (GLWA)
January 7, 2018 (Updated Through the Last MOU Meeting in Late May, 2017)

As noted subsequently, many of these business issues existed in the Detroit Water and Sewer Department (DWSD) operations and were inherited by GLWA as part of the split between the DWSD-R (Detroit retail operations) and GLWA. Even if the formation of GLWA had not occurred, many if not all of the legacy business issues would have simply continued to be part of the DWSD operations.

The business issues are known by GLWA management and have been part of a Memorandum of Understanding (MOU) group attending to some 'clean-up' issues involving the Lease and Shared Services Agreements. However, the last MOU group meeting, which intended on developing an omnibus amendment to the Lease and / or Shared Services Agreements, was held in the spring of 2017. Several of the backroom functions of note and their status, which are further addressed later on in this listing, follow:

- The need for meaningful financial and budgetary information being provided in order for GLWA management and the Board of Directors to make informed decisions on operating and capital matters.

- GLWA's adopted purchasing policies were one of many of the conditions precedent that were adopted by the GLWA Board in the fall of 2015 as a requirement to effectuate the Lease and Shared Services Agreements. The existing purchasing policies and processes are presently being reviewed by a national government purchasing organization with further enhancements to the purchasing policies expected to be made early in calendar 2018.

- Significantly improved communications with the customer representatives through meetings where projects have been launched with the community representatives actively participating in these decisions. A partnership agreement – One Water Partnership Agreement – was approved by the GLWA Board of Directors in early November 2017. Communication through pod-casts, weekly newsletters, press releases and other forms of communication (like the FY-2016 year in review publication) are now being produced.

  GLWA has now developed a research arm for water and sewer technology charged with securing grants and similar funding sources, as well as actively participating in the technical publications involving water and sewer management.

- Lien process engineers have been secured and processes at the plants and business functions throughout the organization are underway in various areas from the plants to the backroom functions. The activities involving the energy needs of GLWA and controlling / reducing these costs is an area under review and hopefully will be able to provide significant savings over existing spending levels.

The above is not mean to be an all-inclusive listing of efforts underway but an indicator of changes in addressing known business issues, with identification of the issue being critical as the first step in the process of improvement. Further discussions are enclosed. GLWA management has issued a publication entitled '2016 Year in Review' in early calendar 2017 that outlines a number of successful business accomplishments that is available on the GLWA website. A similar publication would be expected to be issued in 2018 for calendar 2017.

ISSUES TO BE RESOLVED PRIOR TO THE RELEASE OF THE JUNE 30, 2017 AUDITED FINANCIAL STATEMENTS

The City of Detroit issued its comprehensive annual financial report (CAFR) in late May 2017 for the fiscal year ended June 30, 2016. The CAFR included the DWSD (combined retail and whole operations) for the first six months through December 31, 2015 and for retail operations in the last six months of the year (January 1, 2016 through June 30, 2016). Because the agreements involving sewer shares, excess lease payment, allocation of GLWA debt / debt service and other beginning balance sheet matters in connection with the January 1, 2016 bifurcation, the auditors' report and the City's CAFR cited (in several instances) that the DWSD financial statements for water and sewer will likely change from what was reported in the FY-2016 CAFR. Similar references were made in the GLWA audited financial statements for the six months ended June 30, 2016 for the business issues involving the upcoming MOU discussions.

Recently, Plante & Moran, the City's auditors, performed an audit of the DWSD financial statements as of and for the six months ended December 31, 2015, such financial statements included a balance sheet, operating statement and cash flows, along with appropriate footnotes, for that period. In doing so, there is now a permanent record of the beginning DWSD balance sheet used as a basis for bifurcation as of December 31, 2015 that neither party – GLWA / DWSD-R – could dispute.

The following issues should be addressed as part of the closing process relating to the June 30, 2017 audited financial statements and have been communicated to the GLWA auditor (as well as other matters included in this document) as part of the Statement of Auditing Standards No. 114 requirements:

1) **Lease Payment of $25.0 Million** – the intent of the suburban and Detroit parties was to provide a lease payment in the amount of $50 million per year for 40 years ($2.0 billion) as stated clearly on pages two and three of the September 9, 2014 Memorandum of Understanding. The rates / charges budget for the period July 1, 2015 through June 30, 2016 provided for the collection from the DWSD-R and the suburban customers as well as a 'common-to-all' cost (roughly $12 million from DWSD-R; $38 million from suburban wholesale customers).

   Lease payments are to be held by GLWA within the DWSD-R capital programs as defined and were provided to the City's DWSD-R program in exchange for an increased governance role in the then DWSD operations (called a 'control premium'). The lease payment was to occur upon the effective date of the GLWA, which originally was thought to be July 1, 2015, in the spring of 2015 as the rates / charges and budgets were developed by the DWSD Board of Water Commissioners (BOWC).

   Unfortunately, the GLWA Board of Directors and the City of Detroit approved the Lease and Shared Services Agreements on June 12, 2015, but because many issues remained outstanding these Agreements were not effective on July 1, 2015 as originally anticipated. Instead, these Agreements and various business issues required additional due diligence and the GLWA Board approved these Agreements conditioned on the satisfactory resolution of roughly a dozen unresolved business issues ('conditions precedent' to the launch of the effective date of the lease).

During the ensuing six months ending December 31, 2015 and leading up to the vote in mid-December 2015 to acknowledge the satisfactory completion of the 'conditions precedent', the Lease and Shared Services Agreements and Master Bond Ordinance was drafted and approved as well. At least one section of these Agreements were contradictory with the intent of the parties expressed in the September 9, 2014 Memorandum of Understanding and reflected the need for GLWA to provide DWSD-R a lease payment of $25.0 million for the period July 1, 2015 to December 31, 2015. Regrettably, the Lease and Shared Services Agreements were not effective during this period, the Detroit BOWC was the governance board in charge and several of the 'conditions precedent' were not resolved right up to the December 2015 GLWA Board meeting accepting the satisfactory completion of the 'conditions precedent' then triggering the effective date of the lease on January 1, 2016.

Said differently, despite GLWA's payment of $25 million as a lease payment, no lease payment was required for the period July 1, 2015 to December 31, 2015. The result was an over-payment by GLWA of $25 million reflected in the DWSD and GLWA audited financial statements.

The problem surfaced in the accounting treatment of the transaction days prior to the release of the GLWA and DWSD audited financial statements for the six months ended June 30, 2016 and December 31, 2015, respectively.

2) **Accounts Receivable Run-off -** In accordance with the Lease and Services Agreements, the GLWA recorded the net accounts receivable balances of DWSD-R customers on the GLWA books as of January 1, 2016. In theory, as the cash receipts flowed into DWSD-R for the payment of the receivables, DWSD-R was to parse the amounts applicable to pre- and post-December 31, 2015 operations. Cash receipts for periods prior to January 1, 2016 would serve to reduce the December 31, 2015 receivables transferred to GLWA; while those collected for operations after December 31, 2015 would be collected and transferred to GLWA for the post-December 31, 2015 period as outlined in the Lease and Shared Services Agreements.

   The accounts receivable run-off matter has been on the MOU agenda since its inception in early calendar 2016. Partial payments made by DWSD-R customers on delinquent accounts (both pre and post December 31, 2015) complicate the matter as the application of the receipt needs to be considered even as it has not be specified by the customer. Since DWSD-R customers receive one bill for water and sewer services, partial payments are further complicated.

3) **Transfer of Water Mains -** When the water Lease and Shared Services Agreements were signed in December 2015 it assumed that any water main at or greater than 24" within Detroit would be the operating and maintenance responsibility of GLWA; those mains below that size would be DWSD-R's responsibility to operate and maintain. Upon further review, it was determined that there are 24" or greater water mains that are 'dead headed' water mains serving only Detroit retail customers and being maintained by GLWA. A detailed review was undertaken in this matter to assess which water mains should be moved from GLWA's responsibility to DWSD-R to operate and maintain, but no agreement was reached on all of the water mains under consideration.

   The effect should not have any significant impact on the operating costs of GLWA as field personnel would simply be tasked with other GLWA duties. DWSD-R may have to add personnel to address the added duties of maintaining the over 24" water mains solely used in the transmission of water to Detroit customers.

After months of research and meetings with no resolution to this issue, DWSD-R and GLWA have agreed to take this matter to arbitration arising from a GLWA Board resolution in December 2017. If the requirements of arbitration outlined in the Lease Shared Services Agreements are met as to timing, the results of arbitration should be completed no later than spring. The financial issue for consideration, however, is that sinkholes may have occurred over the past two years and this winger that were repaired by GLWA rather than DWSD-R based on beneficial use of the infrastructure above 24" but serving only DWSD-R customers..

4) **Billings by DWSD-R Water to GLWA Sewer Operations** - In spring 2017, it was discovered that DWSD-R was billing GLWA sewer operations for water usage produced by a GLWA water plant over lateral infrastructure maintained by GLWA. The connections from the water plant, lateral infrastructure (pipes) and connection to the sewer plant were at least in part GLWA assets under the Lease Agreement. Certain connections involving three lateral infrastructure connections may have portions of DWSD-R customers attached to it. DWSD-R has been billing GLWA water usage as if the GLWA sewer plant were a DWSD-R customer in perhaps an amount of $6 million annually for two years; such amounts have been paid by GLWA to DWSD-R with the understanding that any amounts finally determined to be incorrectly billed would be returned to GLWA by DWSD-R.

   As DWSD-R water returns funds to GLWA sewer and stops billing GLWA for this water flow, the reduction in GLWA sewer costs will benefit, to some degree yet to be calculated and the sewer 'common-to-all' charges to DWSD-R from GLWA would receive a benefit as well as the suburban wholesale sewer customers (DWSD-R is roughly half the sewer costs, but roughly only 15% of the water costs).

   Overall, however, there will be a net benefit to the GLWA sewer operations in FY-2018. The GLWA management and auditors must consider the impact on the sewer's audited financial statements for the periods ended June 30, 2017. Further, if this matter is as large as expected this erroneous transaction could have an adverse impact on DWSD-R water rates / charges for FY-2018 and beyond as it could eliminate volume from the DWSD-R water operations (causing the existing costs to be funded from a lesser DWSD-R revenue base). To date, the analysis of The Foster Group has made no mention of this matter.

5) **Debt Amortization** - At the conclusion of the June 30, 2016 audit, the allocation of the long-term debt (largely bonds) between DWSD-R and GLWA was settled upon. However, the amortization of the debt in periods beyond June 30, 2016 remained open as to the length of time and the underlying interest rate to be used. Because the operating budgets used for the calculation of the rates / charges are largely based upon cash transactions for certain "expenses" (such as debt service), any resolution of this allocation of annual debt service charges to be allocated to / from DWSD-R / GLWA must reflect a cash basis of transactions. Neither party should benefit to any significant degree with deferrals of full payments of debt service based on a reasonable allocation basis owed by either party. The amount remains open at this point in time but would impact the allocation of FY-2017 and beyond debt service.

6) **I & E Funding** – I & E represents the cash available to invest in capital programs from cost of service receipts after the operations, debt service and funding of the restricted assets as required under the Master Bond Ordinance. Essentially, it is cash available to be used to cover capital needs of the system. The Foster Group prepared a recent analysis for the Board of Directors for the 18 months

ended June 30, 2017 for the sewer system. The I & E remaining for the GLWA and DWSD-R systems was short after funding the noted items above by $78,000 and $6.9 million, respectively.

Essentially, for the 18-month period ended June 30, 2017, GLWA funded the short-falls for both sewer entities. It should be noted, however, that the sewer receipts include components for both suburban and Detroit common-to-all costs. Presently, there is no policy associated with the resolution of a shortfall in the I & E account at year end. A similar analysis should be performed using final audited amounts and then discussed and incorporated into the anticipated MOU supplementing the Lease and Shared Service Agreements as to future process issues.

With the new issues having surfaced in early November involving Michigan Warehousing Group and the United House of Prayer (Fireline) and discussed in detail subsequently, the reconciliation of resolution of how the deficits in the I&E accounts will be resolved.

OTHER CURRENT BUSINESS ISSUES TO BE ADDRESSED

1) **Timely, Accurate and Relevant Financial Information -** The lack of credible financial information and related analyses has been and remains a significant management issue up to and through the approval of the FY-2018 rates / charges and operating budget and beyond. The GLWA rates / charges, operating budget and capital improvement program was approved by the Board of Directors on June 7, 2017 without much actual financial information having been available to do so as has been the case in past years. The City issued its audited financial statements, which covered the DWSD-R, as of and for the fiscal year June 30, 2016 in late May 2017. The DWSD audit conducted by Plante as of and for the six months ended December 31, 2015 (pre-bifurcation) was issued in mid-July 2017 – roughly 19 months after year end. The GLWA audit conducted by Rehmann for the six months ended June 30, 2016 was completed by July 31, 2017 – 13 months after the year end.

   The primary issue leading to the delays of the audit report involved the ability to produce an historical DWSD balance sheet as of December 31, 2015 as a starting point for the DWSD-R and GLWA operations and related bifurcation into its component parts for each entity. Once prepared in late May 2017, the individual assets, and liabilities and related equity position on the balance sheet (i.e. accumulated deficit) was split into the two parts: DWSD-R and GLWA.

   Some of the more troublesome issues have been identified in this document (fixed asset, debt and debt service allocations, etc.) or remain open for the MOU group to address. The weak functionality of the DRMS system (i.e. Detroit's mainframe, cash-based system) contributed to the delays as well. The MOU discussions should have been completed so as to have had all issues contained in this listing completed and the FY-2017 audited financial statements having been reflective of the resolution of these issues. Unfortunately, this will not be the case.

   In the coming months, it is expected that the new GLWA financial system (including payroll and personnel system) implemented in winter 2016 will be able to provide periodic budget to actual statements, balance sheets and other 'normal' financial information in order to assist management and the Board of Directors in better understanding the interim financial results and provide corrective actions to resolve business issues on a timely basis. Fiscal notes, as required in the Shared Services Agreements, could be prepared to amend the operating budget (presently and uniquely to GLWA the administration has been amending the budget without GLWA Board approval). The GLWA staff has indicated that periodic ***actual*** financial results – for the first time ever – will be available in the winter of 2018.

As of this writing, no interim or annual financial statements (including budget to actual, operating and / or balance sheet) have been supplied to the GLWA Board.

2) **Capital Improvement Program –** At the outset of the GLWA, the capital program was in substantial disarray causing projects to be launched and abandoned even as bonds were issued and capital costs incurred. Substantial write-offs had been observed in the roughly 8 years prior to December 31, 2015. GLWA recruited an Oakland County Water Resource Commissioners' chief who is now in charge of the GLWA capital program and has brought sensible principles into the process, including: the identification of the capital need, prioritization, return on investment, transparency to the user community, funding considerations and a host of other key management information in order to make informed decisions on a program involving roughly $1.3 billion in capital spending over the next 5 years as reflected in the FY-2017 CIP report.

   Integration of the financial system information with that of the capital program remains a key objective that hopefully will be attained prior to the GLWA Board's approval of the capital plan in the winter of 2018. Unfortunately and as discussed at the January 5, 2018 Audit Committee meeting, the financial summary of available resources, new resources and expenditures to be incurred over a 5-year period included in the FY-2019 to FY-2023 capital improvement program report has not been updated since the prior year's budgeting process.

   Regrettably, much of the existing capital program needs arise from deferred maintenance over an extended period of time and the roughly 2 to 3 years leading up to and during the bankruptcy where borrowing was not feasible and only further delayed the requisite maintenance. Substantial progress on the information needs of the GLWA management and Board has been achieved in the past several years on this critical and costly program. Based upon the prior year's CIP projections for FY-2018 – FY-2022, the amounts expended for the 18 months ended June 30, 2017 are well behind expectations outlined in the prior year's report (roughly $155 million expended on a capital program of $1.27 billion in the first year and a half of a five-year capital program).

   GLWA management has committed to adjust the prior year's level of 5-year expected expenditures to reflect the reality of the ability to manage and spend these capital resources in accordance with the proposed 5-year budget projections as outlined in the January 5, 2018 Audit Committee. Project initiation and likely completion dates will likely be delayed. However, in doing so, the delay eliminates the need to issue bonds (other than State Revolving Fund loans) from now and through FY-2020.

2) **Shared Services Agreement -** As part of the launch of the GLWA, a Shared Services Agreement was entered into between the City and GLWA covering common services (Information Technology, motor pool, security, etc.) that would be provided by either DWSD-R or GLWA and the billing arrangements associated with the service. The completion of the Shared Services Agreement occurred just prior to the approval of the leases involving DWSD-R and GLWA and left a fair amount of business issues to be resolved in 2016.

   The reconciliation of the various services provided by either DWSD-R's or GLWA's billing to the other party was partially completed at the time of the June 30, 2016 audit report release in July 2017. For those areas not yet completed an agreed-upon estimate with DWSD-R was used. Unfortunately, for too many of the areas the shared service 'true-up' for the six months ended June 30, 2016 and fiscal year ended June 30, 2017 remain unresolved as of December 2017 and yet agreed to between GLWA and DWSD-R.

The Shared Services agreement contemplated hiring a consultant to review the final reconciliation and agreement of amounts, along with the bases of calculation with the intent of receiving the consultant's recommendations relating to the process and final agreed-upon amounts. Whether the consultant will be hired is presently uncertain given that the shared service 'true-up' for the first 18 months of operation of GLWA remain unresolved.

3) **Highland Park** – The recent amounts owed GLWA by Highland Park is over $36.0 million and increasing at a pace of approximately $400,000 per month. At June 30, 2012, the amount owed by Highland Park to DWSD was $11.1 million. When reviewing the amount owed by Highland Park as of June 30, 2012 and considering all of the interim payments since that time through May 2017, Highland Park has just recently paid amounts sufficient to cover its water and sewer billings from DWSD / GLWA, but still owes GLWA services rendered since June 30, 2012. The effect of Highland Park's delinquencies represents a 3% "surcharge" on amounts billed to all other suburban sewer wholesale customers and a much smaller percentage for water services.

There are three litigation filings in progress:

- **DWSD v. HP – Wayne Circuit Court.** DWSD (now GLWA) has been successful through the Court of Appeals, but HP is now appealed to the Michigan Supreme Court. There is no timetable in which the Supreme Court is required to take action.

- **HP v. United States EPA et. al. – U.S. (Federal) District Court.** Many of the assertions proven to be unsuccessful in the Circuit Court have been asserted by HP in this litigation. GLWA has challenged whether the federal court is even an appropriate venue. The continued delays by HP in submitting timely responses has resulted in the federal district court judge to now be in a position to accept no more filings; a ruling expected in the very near term. On venue and the underlying assertions, if the judge is so inclined.

- **Oakland Park, LLC v GLWA – Wayne Circuit Court.** Involves a single taxpayer asserting that if the judgment levy is imposed they will lose the value of their property in doing so. They are challenging the ability to use a judgment levy under the Clean Water Act. Many of the issues cited in this case are similar in nature to the HP assertions in the DWSD v. HP case.

The GLWA administration has been actively working with the State and Highland Park towards a mutually-acceptable agreement involving the delinquent amounts owed and for future services to be rendered. While the State and GLWA's proposals are closely aligned, Highland Park has recently filed in court yet more challenging the amounts owed. Responses to the filings are pending.

On or about September 11, 2017, the City of Highland Park filed yet another motion in federal court involving the unpaid bills essentially counter-suing the GLWA (formerly DWSD) for the amount owing noted above. The Michigan Supreme Court has recently rejected Highland Park's appeal.

4) **Unemployment and Other Termination Costs -** The lease and services agreements have stated that certain costs (including unemployment) would become the responsibility of GLWA. In November 2015, DWSD terminated a number of individuals who received unemployment benefits into calendar 2016. These benefits were paid by the City and are owed by GLWA under the lease agreements; such amounts are approximately $5.2 million. The actual amounts paid by the City on behalf of GLWA will be audited for employee terminations in fall of 2017.

5) **Extraordinary Repairs and Replacement Reserve –** In prior years, DWSD has been funding an emergency repairs and replacement account in accordance with the Master Bond Ordinance. The lease and service agreements did not address these significant accounts (sewer balance held by GLWA at June 30, 2015 - $32.5 million; water - $24.4 million). The MOU group worked through the issues of how this is to be funded by DWSD-R and GLWA, when it would be used, how it would be replenished and other process issues. A draft section on emergency repairs and replacement has been proposed for the MOU and is under consideration.

   Clarification of the treatment on investment earnings for DWSD-R assets held by GLWA is being reviewed. [Note – the general practice in these matters should be investment earnings follow principal – meaning any investment income derived from these assets held by GLWA would inure to the benefit of DWSD-R].

6) **GLWA Bank Accounts Held by DWSD-R -** There are three bank accounts in the possession of DWSD-R holding GLWA cash. The type and nature of these accounts could not be identified in the May 4, 2017 meeting. For these accounts the DWSD did not submit the cash to the GLWA in accordance with the lease agreement terms and the Master Bond Ordinance. The DWSD-R has on numerous occasions been requested to close the accounts and remit the cash in accordance with the lease agreements and agreed to do so in the spring. These accounts remain an open issue even today. The amount in these bank accounts is $65,823.

7) **General and Administrative Cost Allocation -** The DWSD-R has challenged the methodology of cost allocation relating to the <u>net</u> administrative and general expense (after eliminating the direct billings related to Shared Services cost allocation not yet completely finalized and as discussed earlier). The present allocation method allocating administration and general expense has been based on flow for decades and is a common practice in the utility industry. A DWSD-R financial analysis, which has been revised several times over the past, would suggest that DWSD-R believes a movement of up to $9 million annually in operating costs would occur from DWSD-R to GLWA for both water and sewer services.

   Several allocation methods are being recommended by DWSD-R other than on flow, including: on a per capita basis, on a per wholesale customer basis (which would result in a community the size of Royal Oak Township paying for these costs in an equivalent amount as Detroit's payment) or other basis. GLWA administration agreed to and has initiated a cost of service study in the summer of 2017 that would incorporate, among other matters, the method of allocating administration and general expense on a basis yet to be determined or retaining the existing formula based on flow. The study is presently on-going.

8) **Reconciliation of GLWA and DWSD-R Operating Budgets and Cash Transactions-** The Foster Group has been asked to assist in reconciling the DWSD-R operating and capital budgets to the GLWA operating and capital budgets. On March 16, 2017, the BOWC preliminarily approved the DWSD-R

operating and capital budgets. No further action was taken and some question exists if the DWSD-R has an adopted operating budget for FY-2017 rather than a 'tentative' budget.

DWSD-R then sent these budgets to City's Financial Review Committee which preliminarily approved it on March 27, 2017 with the FRC referencing this information as a 'placeholder' budget without definition as to what this means. The format of the GLWA and DWSD-R budgets is very much different from one another and complicates comparisons. DWSD-R agreed to put the budget in the GLWA format for use in this process but has not done so at this time. The reconciliation is pending.

The recently-hired new CFO has asserted that this matter will not be an issue in the forthcoming years. However, the reconciliation of the cash positions of DWSD-R to GLWA remains exceedingly troubled arising from the DWSD-R's failure to perform timely bank reconciliations to its general ledger and other standard internal control processes. It is critical that the underlying transactions of the GLWA's agent, DWSD-R, be reconciled to the transactions of GWLA – particularly cash transactions. The absence of this reconciliation now will result in a permanent inability to do so in the future with likely material errors surfacing between these two legal entities.

9) **Lock-Box -** DWSD-R is attempting to establish a lock box for its receipts that would be an interim depository before the GLWA general receiving trust account established in the lease and service agreements and Master Bond Ordinances. It is the intent of DWSD-R to deposit its receipts in this lock box and in turn, DWSD-R is promising to then remit the proceeds to the GLWA general receiving trust account in a timely manner after review of the receipts by DWSD-R personnel.

   From Oakland County's prospective the lock box is unacceptable and will not be supported – if for no other reason that it affords DWSD-R the ability to withhold collections from the timely deposit into the GLWA general receiving trust fund. One only has to look to DWSD-R's earlier position concerning the three bank accounts remaining open for months in non-compliance with the lease agreement and Master Bond Ordinance to see the potential business issues that this lock box could create. The issue remains unresolved.

10) **Power Failure at Sewer Plant -** On May 24, 2017 the Board members were noticed that there was a power failure at the sewer plant that now requires extensive repairs over perhaps 8 to 12 weeks of effort. Added generators have been on site and ready to be installed if necessary. While there is no immediate danger of a complete loss of power at the sewer plant (and no such problem in processing effluent has occurred since the incident), the redundancy issue surrounding the plant has been reviewed and is in progress of being resolved by GLWA administration.

    An investor / speculator secured property nearby the sewer plant in anticipation of the sewer plant's electrical redundancy needs and periodically has pressed for DWSD (and now GLWA) to acquire his property in order to provide a pathway from DTE to the sewer plant for electrical service. Presently, there are several current layers of operating redundancy protecting the sewer plant from failing to operate.

11) **Floods – Jefferson Chalmers Area –** In the summer of 2016, there were two instances in which rains overwhelmed the sewer and pumping systems in place that sewer flow backed up into Detroit residents' basements. The DWSD-R filed a lawsuit against GLWA even as the lease and service agreements with the City would have these disputes arbitrated, rather than processed through a filing in court. At the time, DWSD-R indicated that they believe that 65% of the dollars settled with

800 residents choosing not to participate in a class action lawsuit would be the responsibility of GWLA; such amount exceeds $6 million by DWSD-R's estimates for the settled claims alone.

Just recently the DWSD-R and GLWA legal staffs have agreed to a cooperative legal defense and coordination concerning the flood matter.

12) **DWSD-R v. Michigan Warehousing Group, LLC.** – on November 7, 2017, the evening before the November 8, 2017 GLWA Board meeting, County Executive Patterson sent the Oakland County Board representative an inquiry concerning the Michigan Warehousing Group lawsuit settlement of $29.5 million against DWSD-R and GLWA. A friend of his had seen a notice in a legal newspaper of the settlement matter. Given that the GLWA Board had no briefing on this settlement offer and settlement, inquiries of GLWA management were made in advance of the November 8, 2017 Board meeting.

In 2015, the Michigan Warehousing Group, LLC (a class action lawsuit) sued DWSD-R over the methodology used in billing for stormwater charges. Among the plaintiff's assertions were that not all non-residential customers were being billed and / or billed properly resulting in a disparity of those DWSD-R customers actually funding the underlying stormwater costs. In October 2016 and using the City's geographic information system, the City apparently discovered impervious surfaces tied to roughly 22,000 acres not being billed – meaning that those DWSD-R customers that were billed were covering all stormwater costs.

The lawsuit was settled between the Michigan Warehousing Group, LLC and DWSD-R and signed off by Mr. Gary Brown as DWSD-R CEO on August 31, 2017 (who is also a GLWA Board member). In a side agreement (either orally or in writing and yet to be determined), the DWSD-R and ***GLWA administration without the knowledge, concurrence of and approval from the GLWA Board Directors*** agreed to split the cost of the settlement of $29.5 million on a 50 / 50 basis (meaning GLWA, under their assumptions, would pick up half of the settlement costs, or $14.75 million as a 'common-to-all' cost).

Given that the suburban wholesale sewer customers cover roughly 52% to 60% of the common-to-all costs, the GLWA administration's agreement would be paid, in large part, by the suburban interests. Nothing has been received to date in writing that would suggest that the suburban wholesale customers have benefitted in any way from this settlement agreement by GLWA administration.

A $10.0 million payment was due to the Settlement Trust on December 31, 2017 with the remaining $19.5 million being paid in early July 2018. The latter payment is to be either credited to the DWSD-R customer accounts based upon the claims to be filed by the various customers in either cash refund or credit against future sewer bills. The GLWA Board voted on a 4-2 basis (two dissenting votes from Oakland and Macomb Counties) to pay half of the amount due by December 31, 2017 from GLWA resources.

The GLWA administration had no authority to sign off on this settlement absent approval by the GLWA Board. No discussions were held with the Board or any notice whatsoever during the 2017 summer months leading up to the signing of the settlement agreement on August 31, 2017 despite the Board of Directors holding approximately roughly two meetings per month (six meetings since the settlement was signed on August 31, 2017). Nor was the Legal Committee of the Board of

Director called for consultation. Nor, was there any notice to the Board that GLWA wholesale customers (based on the GLWA administration assumptions and DWSD-R) would assume a sizable portion of the $14.75 million in the litigation settlement as 'common-to-all' costs arising from Detroit's excess stormwater charges now being returned to the DWSD-R customers.

In fact, the legal representation for GLWA has been asked to respond to their breach of ethical responsibilities under the following legal canons – the reference to 'client' in this case is the Board of Directors of GLWA:

- MRPC 1.4 (a) – "A lawyer shall keep a client reasonably informed about the status of a matter and comply with reasonable requests for information. ***The lawyer is also required to notify the client promptly of all settlement offers***, ..." Emphasis Added.

- MRPC 1.4. (b) – "A lawyer shall explain a matter to the extent reasonably necessary to permit the client to make informed decisions regarding the representation."

Finally, even as this matter was unfolding as of November 7, 2017, the GLWA Board approved the One Water Partnership Agreement with this communities that promised '...open and honest communications...' to its members. In this case, the communications were withheld from the communities and their Board representatives for at least 90 days.

During the course of discussing the Michigan Warehousing Group, LLC litigation, roughly a dozen other settlements were discovered as well made by GLWA administration in the approximate amount of $5 million in total. The largest settlement, United House of Prayer v. DWSD (GLWA), was discovered. In this case, which was brought using the same plaintiff's attorneys as Michigan Warehousing Group and asserted similar claims, was settled for $5 million, with GLWA paying $4 million of the settlement to DWSD-R customers. The GLWA Board had no knowledge of this settlement offer, settlement or payment prior to inquiries arising from the Michigan Warehousing Group matter.

The Lease Agreements / Service Agreement indicate that the liabilities of DWSD and assets as specified carry-over to GLWA and not the DWSD-R. Under this notion, the assertions proffered by GLWA administration and as asserted in the underlying lawsuit indicated that because of the requirement of GLWA to assume the DWSD liabilities, the obligations for this loss would become a 'common-to-all' cost. Therefore, under this theory, GLWA would be obligated to pay the settlement loss and it would be shared between the DWSD-R and suburban wholesale customers. Oakland and Macomb Counties reject this theory completely.

The Michigan Warehousing Group, LLC lawsuit against GLWA has assumed that the assets received would cover the settlement agreement which is factually incorrect for at least two reasons:

- The audited financial statements as of December 31, 2015 (which were received on or about July 31, 2017) reflect a $171.3 million accumulated deficit *plus* a negative equity position in the line-item of 'net investment in capital assets' of $155.2 million for a **total of $326.5 million** – defined as liabilities ***in excess of assets***. Given that GLWA assumed the assets and liabilities as audited, it was placed in a disadvantaged position by DWSD for many of the reasons outlined in this business issue listing. There were insufficient assets transferred to cover the liabilities assumed.

- The DWSD-R charges for retail and wholesale sewer services, regardless of amounts billed to individual customers or not, were used to cover the operating, debt service and capital costs and restricted bond covenant requirements for the periods collected. Said differently, whatever DWSD-R assets arose from customer collections for billings – both prior to January 1, 2016 and after December 31, 2015 - have been spent for DWSD-R's operations, debt service and capital costs and restricted bond covenants requirements.

  Relatedly, there seems to be a notion that the DWSD-R collections are benefitting the GLWA operations within the Warehousing v. GLWA lawsuit. This isn't true. In fact, the collections are depositing and assigned to the DWSD-R and restrictively held for their portion of the common-to-all operations and debt service and certain capital costs and requirements under the bond covenants. All amounts deposited by DWSD-R to GLWA post-December 31, 2015 ultimately will be returned to cover the retail operations, net of the common-to-all DWSD-R debt service costs and amounts held by GLWA to cover the DWSD-R responsibilities under the bond covenant requirements.

The notion that the DWSD-R lawsuit settlement should be charged to the suburbs is also flawed. The DWSD-R billings to its customers involved transactions before January 1, 2016 were entirely controlled by DWSD (and the management currently place at GLWA) and, in theory, allocated to DWSD's operating and debt service costs and requirements under the bond covenants to DWSD, not to the wholesale customers (who had similar funding obligations). In fact, similar lawsuits arising in the suburbs have resulted in the communities' retail operations standing the cost of the loss, with no reimbursement from DWSD-R or GLWA – the suburban customers stood the loss out of ***their retail operations***.

As of the June 30, 2015 audited financial statements issued in early June 2016, the DWSD CFO (who is currently the GLWA CFO) recorded a $12.0 million liability for the Michigan Warehousing Group litigation. As of December 31, 2015 DWSD and GLWA (and as of June 30, 2016) the liability was increased to $16.0 million (even as GLWA was not a party to the underlying lawsuit). As this liability was accrued and not paid to date, NO costs have been formally allocated to either party for purposes of the development of the rates / charges billable to their respective customers for this settlement in FY-2018 or prior. This $16.0 million charge is solely accrual-based and has not been reflected in The Foster Group rates / charges analysis. As such, NO assets exist in GLWA to cover these litigation payments in whole or part at this time.

While the DWSD and GLWA Lease and Services Agreements state that the ***liability*** for this lawsuit is to be assumed by GLWA upon the split into DWSD-R and GLWA effective January 1, 2016, neither document specifically says that the wholesale customers are required to fund a case involving DWSD-R alone. A second test has been omitted from the discussions to date – namely, what is the debit associated with the liability recorded – an asset receivable from DWSD-R or a charge to DWSD-R's position of the operations.

The problem with the assumption that the litigation loss is somehow chargeable to the suburban wholesale customers must be subjected to the second test – namely, which entity benefitted from the underlying transactions and therefore, is responsible for funding the costs. One needs to review the definition of 'common-to-all' in the Lease Agreements which states the following – emphasis added:

Section 1.1 (m): "common-to-all" means the method or methods for allocating to Retail Customers and wholesale customers of the Regional Water System and Regional Sewer System the cost of Water Services and Sewer Services provided by the Regional Systems ***that benefits BOTH wholesale AND Retail Customers, which allocation is determined on a case-by-case analysis of the benefits derived by each customer class from such service."***

The suburban wholesale customers received no benefits from the excess stormwater charges billed and collected by the retail operations of DWSD prior to January 1, 2016 or subsequent to December 31, 2015 and therefore have no responsibility whatsoever in assisting in funding this obligation. The DWSD-R operation incorrectly billed stormwater charges, received them and used them in its operating, debt service and capital activities and for its responsibility under the bond covenant agreements. The fact that years later i the DWSD-R and Warehousing Group (as a class-action member) agreed that it was inappropriate does not then require the suburban wholesale customers to step in the shoes of DWSD-R, in part, because of actions taken by DWSD or DWSD-R.

No benefits inured to the suburban wholesale customers whatsoever from the initial, erroneous billing and therefore the suburban wholesale customers have no obligation to fund the return these excess fees. In fact, since this is a DWSD-R ***only*** charge it begs the question as to why GLWA would even be involved in the loss in the form of recording it on its records.

As a practical matter then, the solution to this issue involves one of the following options –

- DWSD-R treats this as a charge to DWSD-R operations (reduction of revenue, as appropriate) with no recording on the GLWA books not unlike much of the other operating costs for retail operations. This treatment would be wholly consistent with the manner in which suburban communities have been placed relative to the sewer charges for similar losses.

- A liability in GLWA is recorded on the books of GLWA with a corresponding receivable from DWSD-R. However, in doing so, since GLWA has no cash on its books from these transaction as noted previously and the assets assumed by GLWA are in a net deficit position the cash to be paid by GLWA needs to be fronted first by DWSD-R. It should be noted that the I&E account as of June 30, 2016 for the DWSD-R sewer side of the ledger (most recent data available and as calculated by The Foster Group) was in a negative position and remains unresolved.

The resolution of which entity should fund the pre-January 1, 2016 litigation costs for the Michigan Warehousing Group, LLC matter has been agreed to by GLWA to be arbitrated. The United House of Prayer matter will be discussed further at an upcoming GLWA Board meeting. It is the City's position that the representatives of the GLWA Board (i.e. management) were responsible for the noticing and securing approvals from that Board and the time to object to the settlement has since lapsed. As such, the United House of Prayer matter should be considered as a final transaction and the payment to DWSD-R should stand unadjusted.

LEGACY BUSINESS ISSUES

These legacy business issues have and will continue to impact the rates and charges billed to DWSD-R and suburban wholesale customers to varying degrees. These issues are either completed transactions of several years ago and / or out of the control of GLWA to effectuate any changes that might otherwise mitigate the adverse impacts on the rates and charges into the future.

1) **General Retirement System (GRS):**

A meeting was held between GLWA, City and GRS staff to discuss the below items on March 20, 2017. The results of the meeting are highlighted below. Plante and Gabriel Roeder were represented at the meeting as well. Many of the items below were discussed at this meeting. No further discussions since that date have been held and more current information involving actuarial studies and financial information has not been received.

Since the March 2017 meeting, the equity market values have increased substantially and may have a beneficial impact on the market values that could impact the net pension liability and future contribution in periods beyond FY-2023, the point at which the Plan of Adjustment will have no further impact on the contributions required by the City, DWSD-R and GLWA. The below information as developed is based on the June 30, 2016 audited financial statements produced by Plante & Moran for GLWA's benefit as well as the related actuarial information available at that time.

Planet & Moran's audited financial statements for the year ended June 30, 2017 are not yet available. When available, the below analysis can be updated.

a) **Plan of Adjustment / Official Statement Expectations** – a quotation from the August 2014 Official Statement (sewer offering – page 99) in connection with a tendering of bonds concerning the GRS and the DWSD's future expectations for payments at the end of the Plan of Adjustment follows:

> "After the initial nine-year period through June 30, 2023 is completed and certain Outside Funding is received by GRS, the Department will remain responsible for the allocable share of unfunded actuarial accrued liability of GRS but is ***expected to make very small contributions, if any, to the Prior GRS on account of this liability."*** Emphasis added.

Given that 'very small contributions' would be necessary in FY-2024 and beyond, the expectation would be that the DWSD pension pool (now comprised of DWSD-R and GLWA) would have little or no liability requiring any contributions in FY-2024 and beyond. Further, all 'outside funding' has been received by June 30, 2016 and was comprised solely of DIA contributions (fully paid off in FY-2016) and just under $100 million paid by the State in FY-2015 as part of the DIA / Art agreement. The DIA art from non-profit agency contributions were entirely credited to a separate pension plan, the Police and Fire Pension Plan. In addition, the Police and Fire Pension Plan received a State contribution of just under $100 million in FY-2015 as well.

b) **Plan of Adjustment - Structurally Unsound** – attached is Exhibit A comprised of the FY-2016 balance sheet and income statement ('statement of changes in fiduciary net position) extracted from the GRS audited financial statements; such audit was conducted by Plante & Moran. In addition, the financial statements a schedule entitled "General Retirement System – Financial Analysis" has been prepared arising from the FY-2016 and prior audited financial statements for the GRS.

In an effort to project the real financial status of the June 30, 2023 DWSD Pension Pool within the GRS, the first step is to review recent operating history and consider base operations over the next several years. Comments on the review of the financial history follow starting with a base of the FY-2016 actual operating results:

- The investment income actually obtained in FY-2016 was a meager $19.9 million on over $2 billion in investments. The market value of the portfolio declined by $33.2 million – for a **net investment loss** of $13.3 million. The actuarial assumption return on investments has been assumed to continue to be 6.75%, the actuarial assumption of the long-term investment income even as recent history of the GRS has not reflected this high of a return (see subsequent comments).

- During FY-2016, the GRS experienced a reduction in the investment portfolio of $33.2 million arising from market declines and the likely disposition of illiquid assets (i.e. real estate as an example). Given that market fluctuations are part of the actuarial assumption, the losses have been eliminated and now embodied in the above adjustment 6.75% investment return assumption relating to investment income.

- The DIA made an advance funding of their commitment to raise contributions from the communities (which was then discounted at 6.75%) and only a minor amount of funding remains on an annual basis through June 30, 2023. This one-time payment was roughly $32.8 million as discounted from the $50 million commitment over a 9-year term. As any future contribution from the DIA is minor in amount, it has been ignored in this analysis.

The projected proforma operating results, as reflected in Exhibit A, is the <u>'best case'</u> scenario expected over the period from FY-2017 through FY-2023 (based on the information at that time as noted earlier in this section of the listing of business issues)**.** Using the proforma projections, the estimated reductions in net equity will continue throughout the period through FY-2023 resulting in a denigration of equity of perhaps $94 million times 7 years, or $658 million creating additional unfunded liabilities as a result. Unfortunately, using this single year a means of projecting omits many factors that could and will impact the reductions, almost all of which serve to further reduce the net equity of the GRS, including but not limited to:

- As noted in the GRS audited financial statements ending June 30, 2016, the ***actual*** five-year average investment performance was 5.9%, not the actuarially assumed 6.75% reflected in the above projections. If the 5.9% actual investment return assumption can be maintained for the next seven years, it would have an impact of contributing to the net equity reduction by an estimated $15.5 million annually (5.9% / 6.75% x $123M), or adding to the further erosion of net equity of $108.5 million (before compounding is considered further worsening the matter).

- As the net equity declines, the investment portfolio will as well, placing increasing pressures to remain in a shorter position for that portfolio. Shortening the investment portfolio's investments means that the current 5.9% actual return on investments achieved over the past five-years, on average, will not be even more difficult. The ability to estimate the impact cannot be determined at this time and has not been further considered even as it is likely to be an additional fiscal burden for the GRS.

- At June 30, 2016, the GRS investments contain 19% of the portfolio (approximately $376 million at June 30 2016) that has no ready market information available. It is probable that these investments would be difficult to liquidate to cover the roughly $300 million in annual cash payments out for retirees relating to benefits and member refunds / withdrawals. As the investment portfolio shrinks, the percentage component of illiquid assets will increase (assuming no disposals which are believed to be a contributing factor relating to some of the reduced investment performance in the past several years).

- The above pension contributions from the employer are generally the DWSD-R and GLWA contribution of $45.4 million annually, $20 million from the City's General Fund and miscellaneous other contributions. Unfortunately, the Plan of Adjustment states that the City's contribution in the last four years of the period through FY-2023 will be $2.5 million, not $20 million. As such, further erosion of the net equity will occur in the amount of $70 million for this reduction in contributions. The Library pension pool will receive $2.5 million per year through June 30, 2023, the same amount included in the proforma revenue. Similarly, DDOT did not making any adjustments separate from the General Fund in FY-2016, nor is expected to in the periods through FY-2023.

- The GRS balance sheet has a long-term receivable of $104 million from retirees for their share of the excess annuity saving program benefits credited to their accounts in the past. The receivable will be 'collected' through future deductions from the retirees or beneficiaries' monthly benefit checks. Unfortunately, if the retirees / beneficiaries die prior to the full accounts receivable collection, the GRS plan sustains the loss. No provision for these losses has been recorded for this exposure and cannot easily be quantified.

- There is no provision for any downturn in the market that might adversely impact the value of the investments arising from external events. At present, automobile production is at a near record level as is the Dow Jones Average. Numerous areas of national and Michigan fiscal concerns could, in the 7 year period through June 30, 2023, also impact the investment performance including resolving the national debt presently at $20+ trillion and rising, national healthcare, and many other world events too numerous to mention.

- The GRS is comprised of four separate pension pools that independently track contributions, allocated investment income, benefits paid, liabilities earned by pool and other transactions specific to the pension pool. The four pension pools are: General, Library, Detroit Department of Transportation (DDOT) and DWSD (including its components of retail and wholesale operations, now DWSD-R and GLWA).

  In connection with the bankruptcy, Oakland County and the bond insurance agencies independently hired consulting experts to analyze the pension operations. Expert reports were presented on the GRS. In both instances, the experts indicated a weakness in the accounting for transfers of City employees between pension pools that most likely has resulted in significant actuarial losses for the DWSD pension pool.

In general, the net flow of employee transfers was away from the City (General, DDOT and Library pension pools) and into the DWSD pension pool. A proper accounting for the transfer would have included a transfer of the actuarially-funded assets paid to date from the then current pension pool to the DWSD pension pool for those employees moving from the General Fund / DDOT / Library to DWSD. No asset transfers were made or unfunded position of the pension pool where service credits were earned recognized creating an unfunded position in the DWSD Pension Pool.

At the time of the DWSD employee's retirement, the pension pool would be charged in the future for the pension benefits to be paid for the employees entire service period with the City from pension pool where he / she last worked (namely DWSD in this example), regardless of which pension pool those service credits were earned. As such, the City's three pension pools would have benefited from an actuarial gain with the DWSD pension pool incurring a substantial actuarial loss. The ability to assess the movement of employee transfers to / from or from / to DWSD / City cannot readily be determined. However, for ***each person retiring*** with allocation of the proper service periods to the respective pension pools could result in hundreds of thousands of misallocated assets and liabilities.

Unfortunately, given the condition of the GRS and City records and periods of time that would be required to be researched over the employees employment history, the ability to analyze and then quantify the actuarial losses experienced relating to employee transfers will never be known. The likelihood that this could be significant to the DWSD Pension Pool is at least moderate and likely high.

- The benefit commitments owed to active and retired employees earned through June 30, 2014 were frozen and has been dubbed the Component II Plan for all service prior to that point in time. No new employees would be permitted into the Component II Plan or service credits provided beyond that point in time that could impact the liability yet to be calculated as of June 30, 2014. Essentially, the only factors that could meaningfully impact the liability would involve the mortality assumptions and the initiation of retirement benefits. The freezing of the benefits for services rendered prior to July 1, 2014 is a benefit to the DWSD-R and GLWA that cannot be easily quantified.

- While the Plan of Adjustment does provide for a modest trigger under certain circumstances that would require an increase in the employee's contribution as the financial condition of the GRS declines, the impact of the above issues far exceeds any ability for the employee to cover the losses and other issues noted above. As such and like other unquantifiable items cited above, this trigger has not been further considered.

In summary, the known future ***quantifiable*** transactions that are likely to impact the net equity of the GRS follow through June 30, 2023 – all of which will have a dollar for dollar impact on the unfunded actuarial accrued liability at June 30, 2023 – in millions:

• Equity at June 30, 2016	$ 1,933.5
• Less:	
○ Operating losses through June 30, 2023 - above	(658.0)
○ Investment performance below assumptions	(108.5)
○ Reduction of City General Fund contributions	(70.0)
Reduction in future equity	(836.5)
Projected Equity at June 30, 2023	**$ 1,097.0***

*No attempts have been made to factor the compounding effect in the above summary projections, recent increases in the equity market, or the impacts of some of the noted business issues above that will serve to provide varying pressures, both upwards and downwards, on the net equity on the projected equity at June 30, 2023.

Given that the Plan of Adjustment has required funding of the DWSD pension pool (DWSD-R and GLWA) at approximately twice what would normally have been funded using a 30-year amortization period, much of the above reduction in future equity will be attributed to the City, not the DWSD pension pool. However, the DWSD pension pool will be adversely impacted by the reduction in investment earnings allocated each year to this pension pool as the overall assets of the pension system are reduced.

At June 30, 2016, the total pension liability (formerly referenced as the 'unfunded actuarially accrued liabilities with some minor modifications) was $2,925.2 million with assets of $1,933.5 million noted above, the net pension liability would be $991.7 million (after considering the actuarial effects of the adjustments to the pension benefits approved by the City's employees in June 2014).

The net pension liability is the current estimate necessary to completely fund (assuming actuarial assumptions hold true) the service credits earned by employees for future benefits to be paid from retirement until death. Given that there is a 'net pension liability' means services were earned but prior operations failed to set aside appropriate amounts against prior operations. As such, future operations beyond June 30, 2023 must then carry the burden of these costs, along with funding the costs earned by employees in that year of service.

If the assumptions anticipated by the actuaries and projections hold true (and as noted there are several critical unquantifiable negative transactions that could and will adversely impact the net pension liability) then the June 30, 2023 funding status would approximate 37.5% ($1,097.0M / $2,925.2M = 37.5%) for the overall GFS Plan. The separate Plante & Moran audit report for FY-2016 has indicated that the DWSD pension pool absorbs $57.7 million of the $197.7 million for the GRS as a whole (before considering the one-time DIA funding of $32.9 million), or 29.2%.

Gabriel Roeder, the GRS actuaries, projected that the net pension liability. The ability to project the net pension liability for the DWSD pension pool as of June 30, <u>2015</u> was $242.1 million is difficult without further analysis and information. No more current information is available on the actuarial status of the individual pension pools. Notwithstanding this limitation, it is clear that the current net pension liability will increase over the next 7 years and the assertion of the bankruptcy consultants constructing the pension agreements leading to the inclusion of DWSD having little or no contributions beyond June 30, 2014 is wrong – by hundreds of millions of dollars.

The City, GRS and GLWA ***directionally*** agreed with the above during the above discussions without opining on the above projections conducted subsequent to the March 2017 meeting. It should be noted that Plante raised the concern of the net equity being depleted over the next several years during the meeting held in the presentations of the audited financial statements. Further, the actuarial firm has expressed significant concerns as to the level of contributions over the period through June 30, 2023 also contributing to the reduction of the net equity.

While some references were made to the inflow of resources arising from the new 'hybrid' pension plan at the March 2017 meeting, it should be noted that in a two-year time period since the Hybrid Plan's inception and based on the limitations place on it by the Plan of Adjustment, an unfunded actuarial accrued liability of nearly $13 million at June 30, 2016 has arisen – it too is and will likely create further burdens on the City's employees through June 30, 2023. It is doubtful that the Hybrid Plan's performance can be used to offset the continuing decline in the defined benefit legacy plan, also known as Component II (see the format used in the attached Exhibit A for the Hybrid Plan noted as a separate column).

c) **City Contributions (Initially $50 Million) -**The City has 'contributed' $50 million towards its portion of the GRS shortfall by the spring of 2017, but has NOT sent the funds to the GRS. A recent news article has indicated that $105 million has been contributed (with expectations that added contributions and investment earnings will generate roughly $335 million by June 30, 2023). The City created a separate Section 115 trust fund for these deposits rather than providing them to the GRS. GLWA does not have access to the trust agreement and cannot determine what the conditions under which amounts would be released from this trust to fund the shortfalls in the GRS, when or if they could be returned to the City. The City participants in the March 2017 meeting could not identify the conditions under which funds would be returned to the City, if at all.

Related to the above, because the assets are NOT in the GRS, it contributes nothing in funding the GRS's issues involving the depletion of the assets. Therefore, as the GRS assets are depleted, the investment income will be reduced (as cited above). Given that the DWSD pension pool (comprised of DWSD-R and GLWA) receives its proportional share of investment income and market gains and losses the structure the Federal Court's Plan of Adjustment will adversely affect the amounts deposited in the DWSD pension pool by an unknown amount at this time.

The City created the Section 115 trust in order to make deposits into it for the required additional City contributions in FY-2024 and beyond. The problem, however, is the GRS is experiencing the cash flow denigration arising from the City's underfunding of its pension contribution arising from the Plan of Adjustment even as the DWSD-R and GLWA pension contributions nearly doubled arising from the Plan of Adjustment. The DWSD pool (DWSD-R and GLWA) are being and will be damaged over the next 7 years as the investment performance deteriorates and the meager investment income are allocated proportionally. City, GRS and GLWA agreed this will be a problem, but no solution was identified.

It was further relayed during the March 2017 meeting that Miller Canfield has asserting that the Section 115 trust must invest assets at the Act 20 levels (meaning perhaps 2% investment return level). Oakland County has used a Section 115 trust previously for its OPEB transactions and invested long term; the GRS attorney disagrees with Miller Canfield's assessment of the investment restrictions as well. The resolution of this matter is presently unknown, but absent the ability of the Section 115 trust to invest at long-term rates, its very existence would be unnecessary.

d) **Book Cadillac Loss** -The GRS invested in the Book Cadillac (located in Detroit) but wrote-off $21 million of its GRS investment in FY-2016 as reported in the print media. The allocated portion of this investment to the DWSD pension pool is roughly $7 million, of which roughly $5 million relates to the suburban funding of this loss. Given a reduction in the illiquid assets from roughly 30% to 19% in the last audit report and the $13 million in net investment losses in FY-2016, it is highly likely that additional real estate and other illiquid investments were written off as well. The matter was not discussed during the above referenced March 2017 meeting.

e) **Pension Agreement Not Reflected in October 2016 Consultant Report and FY-2016 Audit Report for GRS** - The Financial Review Committee hired a consultant whose October 2016 report and Plante's 2016 GRS CAFR omitted references and consideration of the pension agreement between City / GLWA / GRS. At present, the FY-2016 audited financial statements of the GRS state that the unfunded actuarial accrued liability for the GRS is the ***full responsibility*** of the City with no reference to the future funding commitments from GLWA in error.

   The City, GLWA, GRS and Plante agreed that the pension agreement should have been referenced (particularly since the unfunded actuarial accrued liability's funding responsibility was totally ascribed to City). The released 2016 CAFR will not be recalled, but will be corrected in the 2017 CAFR for GRS to reflect that some portion of the unfunded actuarial accrued liability is the responsibility of GLWA.

f) **Census Data Accuracy** - The accuracy of the census data (e.g. the number of participants and their personal characteristics (age, sex, service life, final average compensation, etc.) remain as an issue known for years but still unresolved. However, the GRS has now recognized this business issue and has a project underway to address it. The effects of the errors in the census data cannot be projected at this time. However, GRS personnel provided no time line for when the census data would be fully corrected.

   GLWA sent a list of 542 employees from a census validation project of GLWA to the City's Deputy CFO (who is also trustee of GRS) for review given census accuracy concerns. These GRS participants characterized as DWSD personnel could have been charged to the DWSD pension pool in error. These many employees improperly allocated – if true – could ***significantly*** impact the actuarial report, actuarial accrued liability (AAL), unfunded AAL and ultimately, the DWSD-R / GLWA pension contributions starting in FY-2017. The longer this goes unattended (and with prior issues not retroactively being corrected) the DWSD pension pool could be adversely impacted. This matter needs to be pursued aggressively in the near term.

g) **Calculation of Frozen Liabilities at June 30, 2014** – The Plan of Adjustment permanently froze the accrued active DWSD employee retirement benefits as of June 30, 2014. The frozen actuarial accrued liability as of June 30, 2014 has still not been fully calculated with only 3,000 of 8,000 participants in the GRS (including those of the DWSD pension pool) having had the amounts calculated as of spring 2017. There are roughly 5,000 participants that are still being calculated at that time. The calculations are labor intensive given the record status. No timeline on when the full amounts would be calculated was provided. At the time the frozen actuarial liability calculation is completed it will have an impact on the actuarial gain (or loss) in the year the adjustment is recognized.

The lack of data should not have an immediate impact on the pension contribution by DWSD-R or GLWA given that this is fixed by way of the Plan of Adjustment. However, eventually this information will be needed to calculate the DWSD-R and GLWA pension contribution for periods after June 30, 2023.

h) **Erroneous Pension Administrative Adjustment at June 30, 2015 -** The FY-2015 City CAFR reflected an adjustment of $2.5 million in error that needs to be reversed in the DWSD December 31, 2015 audited financial statements. The KPMG incorrectly assumed that the administrative expenses under the Plan of Adjustment were due to the City's General Fund and not the GRS. In doing so, the CAFR reflected an incorrect transfer from the GLWA to the City's General Fund ostensibly still owed at the time of the CAFR's release.

   The City and GLWA staff investigated this adjustment. KPMG reclassified expenditures out of operations to create the operating transfer out / in for CAFR purposes only – it was never booked in the accounting records. More importantly, an interfund receivable / payable was not created and DWSD never paid – in cash – the $2.5 million amount to the General Fund as was originally suspected. The recording of CAFR only adjustments is an inappropriate practice and the Plante representative at the March 2017 meeting agreed. GLWA administration asserted that the necessary correcting entries relating to this matter were incorporated with the closing of the December 31, 2015 DWSD balance sheet.

i) **Hybrid Pension Plan.** Effective July 1, 2014, the City introduced a 'hybrid' pension plan for its GRS employees, including those at DWSD at the time. The hybrid plan has characteristics of a defined contribution and defined benefit plan. Over the next two year period ended June 30, 2016, the hybrid plan started at a zero unfunded actuarial accrued liability and increased to $12,945,251 as of June 30, 2016. The Hybrid Pension Plan primarily impacts the DWSD-R operations given that upon GLWA's launch, the employees were solely under a defined contribution plan.

   Unfortunately, the Plan of Adjustment set the pension contribution rates and, based on the two year history, are set too low. Regrettably, the hybrid pension contributions are fixed by way of the Plan of Adjustment through June 30, 2023. Given the Plan of Adjustment limitations on pension contributions, the unfunded position of the hybrid plan is anticipated to grow through June 30, 2023. At that time, the pension contributions will be calculated and the unfunded liability paid from FY-2024 for services currently being rendered.

j) **Billing and Payment Error.** A pension billing and payment error believed to be in the area of $500,000 between DWSD-R and GLWA occurred during the six month period ended June 30, 2016 and remains unaddressed. The matter may have been resolved in connection with the issuance of the June 30, 2016 GLWA audited financial statements but it not known at this time.

2) **SWAP Termination Loss in FY-2012 and Fixed Asset Write-offs** – see detailed discussions below:

   a) **SWAP Termination Loss** – the City's FY-2012 CAFR discussed a SWAP termination loss agreement that resulted in the issuance of bonded debt of $547 million. The SWAP termination agreement required DWSD to issue debt of $547 million to settle disputes with the bondholders over DWSD's non-compliance with debt covenants. This debt, as refinanced since, will be repaid, with interest, over a period ending in FY-2035. The bond debt service costs are includable in charges to DWSD-R and suburban wholesale communities in the future for water and sewer services.

      The SWAP termination loss arose, at least in part, because of Detroit entering into certain variable rate bond transactions and then converting the variable rates into a fixed rate debt instrument, including debt covenant commitments (among which involved the City's bond rating status). In the 2010 / 2011 time frames, the City's bond rating was adversely impacted by the Great Recession and the City's general deterioration of fiscal health. These declines tripped bond covenant requirements that could not be remedied by the City to the satisfaction of the bondholders that could have resulted in the calling of the underlying debt (such liquid assets were not present at DWSD to do so). To resolve this matter DWSD issued new debt to relieve its obligations from the troubled bond covenants.

   b) **Fixed Asset Write-offs** – during the periods from July 1, 2006 through June 30, 2015, the City charged $577 million of fixed assets previously capitalized to operations (based on The Foster Group memorandum on the analysis of these matters). The write-off causes involved a variety of reasons, including but not limited to:

      i) DWSD initiated construction (with likely most of the costs being funded by bonds) but terminated before the projects were completed and placed into operation. The largest loss arose from the collapse of the Detroit River Outfall #2 causing the loss of very expensive equipment being buried under the Detroit River.

      ii) Capital project costs and short-lived assets being capitalized, in error that should have been included in the normal operating budget (and thus, that year's rates / charges). In the capitalization of these items, they were excluded from the rates / charges process, only to be written off once properly analyzed by the current financial staff in FY-2013 to FY-2015. As they were excluded from the rates / charges process, no collections from DWSD-R or suburban wholesale customers occurred and contributed to the accumulated deficigts in the water and sewer fund balance sheets. This erroneous process has been substantially mitigated in the FY-2018 passage of an operating budget.

      iii) Other issues involving the capitalization of costs being written off to operations as obsolete or providing little or no future benefit to operations.

   As most if not all of the above assets were acquired through long-term debt, the related debt service continues to be paid and will likely be paid for a few decades. The DWSD and its ratepayers, however, received little if any benefit from the investments now written off. Both the SWAP termination losses and fixed asset write-offs are reflected in the accumulated deficits of water / sewer funds (the combined accumulated deficit at June 30, 2015 for DWSD for water and sewer is $666 million; such amount will eventually have to be funded from future GLWA common-to-all charges for services). GLWA management is currently developing a 10-year forecast and will be addressing these matters, to the extent feasible, in the coming year's rate / charges season.

At December 31, 2015, the accumulated deficits in the net book value of fixed assets and unrestricted sections of equity for both water and sewer funds was $648.9 million.

An estimate of the impact on the water and sewer charges to wholesale customers, including Detroit's portion of the wholesale costs, has been provided on these two issues and represents an order of magnitude of its impact. With the $577M (debt associated with fixed assets) plus $561M (SWAP termination loss debt) combined, it equals $1.14B out of $5.5B in total DWSD debt or about 20.7% of the outstanding long-term debt. As debt service (principal and interest payments) is over 50% of the operating costs of DWSD, then 10.35% of the charges for all rendered water and sewer wholesale services go towards funding these two issues (50% of total costs are debt service x 20.7% of those costs arising from these two issues = 10.35%).

Expressed in dollars, over the life of the debt, perhaps has much as $1.0 billion will be paid in in debt service payments applicable to these two items alone. Neither provided any productive assets serving to improve operations.

13) **Position Reductions / Impact on Pension Costs** - The personnel positions and thereby operating costs have decreased over the years: from 2,800 full-time equivalents (FTEs) in 2002 to now roughly 1,100 FTEs for GLWA (even as several hundred of the 1,100 FTEs remain vacant at this time, partially offset by consultants used to fill these positions). The largest levels of DWSD FTEs occurred at a time when the DWSD was out of compliance with the federal environmental regulations and under federal court supervision. At the time the regional DWSD Board of Water Commissioners was created under Federal Court order, the FTEs were approximately 2,100. Over the next four years, the BOWC reduced approximately 900 FTEs and finally brought the system into compliance with EPA regulations, despite having 1,600 less positions to do so from the 2002 period.

    The import of this issue is that some of the employees hired in the 1980s, 1990s and 2000s certainly left DWSD without the ability to retire and having no terminated vested retirement benefits. However, many of these individuals are just as likely to have retired and are currently drawing retirement benefits – and contributing to the actuarial accrued liabilities requiring both DWSD-R and GLWA funding post-2023 as discussed previously. The dollar amount relating to this issue cannot be reasonably calculated.

14) **Time Clock** - In 2012, the City changed its time clock system and charged $8 million to DWSD (out of a total cost of $45 million City-wide) as its share of the capital costs based on positions then reflected as being present – both filled and unfilled. The City, however, failed to bill DWSD for the capital costs of the time clock project and simply recorded a receivable due from DWSD in the City's records. DWSD, not having any knowledge of this amount owed, booked nothing for the next three years. The allocation of the time clock costs were based on the number of FTEs in 2012 despite a substantial reduction in FTEs over the three year period through 2015.

In 2015, the City and DWSD reconciled the interfund receivables with the payables and discovered the error. DWSD was then charged and subsequently paid the City for their share of the time clock system.

The City's time clock system installed in 2012 was obsoleted when GLWA installed a new time clock system in connection with the bifurcation process and implementation of a new financial system. The undepreciated costs were written off prior to December 31, 2015 as part of the fixed asset reconciliation efforts as noted subsequently and contributed to the accumulated deficit as of December 31, 2015.

15) **Detroit Records Management System (DRMS)** - The portion allocated by the City for the DRMS was capitalized in DWSD records in 1999 in the amount of $55.6 million (resulting in the suburbs than being responsible for funding roughly $33.4 million). The GLWA financial system recently installed and operational, including that which is applicable to the personnel and payroll preparation and operations, has an all-in cost of roughly $7 million as a sense of the magnitude of the underlying systems' costs between the City's DRMS and the GLWA's current system's installation costs nearly 20 years later.

Of the $55.6 million in DRMS cost assigned to DWSD in prior years, $34.7 million has been depreciated as of December 31, 2015, with $20.9 million of net book value remaining as of that date. The DRMS' cost is assumed to have been funded by DWSD to cover the City's costs in prior years as no outstanding liability exists of recent. The undepreciated cost was written off as part of the FY-2016 closing of the GLWA accounting records.

The depreciation period for the DRMS 'mainframe' system used by the City was set at 25 years and is well beyond any normal amortization period for technology. DRMS was a financial, payroll and personnel system structured on a cash basis using an outdated software program on an aging technology platform.

The City's 1997 CAFR indicated that the DRMS system was purchased from IBM for $48 million with a total project cost, including implementation, of $70 million. As memory serves, the total cost of the DRMS implementation was finally reported at between $120 million to $140 million. The allocation of roughly 46% of the total capital costs and of implementation to DWSD seems proportionately out of line – if it is true that the DRMS cost was $120 million (anything less in total costs would be even more egregious). The FY-1998 and FY-1999 City CAFRs discussed the project but provided no financial information on its status. The DRMS went live in FY-1999.

DRMS has been and continues to be a **significant** contributing factor to the inability to obtain timely, accurate and relevant financial information necessary for DWSD / GLWA management and Board of Director members to make informed decisions on many sizable business transactions. With the completion of the audit report as of and for the six months ended June 30, 2016, GLWA is no longer using the DRMS system and on its own locally-maintained financial system. However, routine financial information on the status of operations, budget to actual comparisons and financial analyses based on actual information has yet to be provided to the GLWA Board but is expected soon. At the recent Audit Committee meeting, a 5-year projected operating budget was provided, but the underlying detailed assumptions and a reconciliation to the CIP program are pending as of the date of this listing.

16) **Radio Communication System** - Circa 2004, the then City Mayor (who had been designated a DWSD Special Master by the Federal Court) entered into a sole-source contract with a radio communications vendor in the approximate amount of $115 million to $120 million. The contract was not approved by the City Council at the time of signing as would have been the normal City processes.[1] The radio communications system was to be used by police, fire, EMS and other City departments (including DWSD) with public safety being the majority of the users. The full amount of the project was signed under a DWSD contract and with the exception of $27 million allocated to the City's General Fund in the first year was charged to DWSD for the remaining amount.

    Wayne, Oakland and Macomb Counties' drain commissioners objected to the inappropriate allocation of radio communication costs allocated to DWSD in the mid-2000s. Over a three-year period (and at great legal cost to the Counties) were eventually successful in reducing the ultimate capital charge to DWSD to roughly $22.6 million when discussions were finalized; such settled amount closed the litigation matters involving this transaction. The balance of the radio communications capital costs was then funded by the City outside of DWSD.

    The allocation of costs of the equipment and operating costs were being addressed as part of the Shared Services Agreement. However, there were differences in the treatment of the cost allocations relating to this asset

17) **Water Residential Assistance Program (WRAP) -** On April 26, 2017, the Board voted on a 4 for and 2 against (Oakland and Macomb dissenting) to transfer $1.66 million in WRAP funds from Oakland ($591K), Macomb ($355K) and Wayne Counties ($718K) to the City of Detroit for use in resolving low-income residents' delinquent accounts. Concurrently, the governor's representative moved to have the Genesee County WRAP funds transferred in the amount of $138,000 for the benefit of the City of Flint residents providing the long-term Flint contract is signed.

18) **Debt Service Increases / Bond Rating of the City** – the DWSD operations were a part of the City of Detroit and linked to the City's fiscal health. As a practical matter, the City's petition of bankruptcy arose not because of activities of DWSD, but the fiscal decline of the City proper. However, given that the regional water and sewer systems of DWSD was part of the City up until December 31, 2015 and therefor included in the bankruptcy filing, the adverse bond rating decline started circa 2007 and accelerated in bankruptcy continuing down to junk bond status or below by 2014 or so (actually in the "C" and "D" range).

    As such, the increasing debt service costs arising from the declining bond debt rating incurred by DWSD in the earlier part of the Great Recession were simply passed along in charges for services to the City's residents and the suburban wholesale customers on debt issued during this period. By the time the City entered into the bankruptcy little or no debt could be issued anyway.

    The amount of its impact on the charges for services cannot be calculated and have been moderated by the bifurcation of GLWA from DWSD and distancing the GLWA operations from the City's operations (with a corresponding improvement in the bond rating provided in recent refinancing and new money bond efforts). The bond rating agencies took notice of the separation of GLWA from the City operations and rewarded GLWA with a substantial upgrade in its bond rating that

[1] Approximately one year later, the City Council retroactively approved the signing of the radio vendor contract.

assisted in the cash savings generated of over $300 million over the remaining life of the refunded debt

19) **Fixed Assets as Proxy for Debt and Debt Service Allocations** - The allocation of the bonded debt and debt service payments into the future was calculated and split between DWSD-R and GLWA based on the existing debt at December 31, 2015. The fixed assets, which were the primary purpose of the debt issuance (outside of the SWAP termination loss matter noted earlier), was the proxy for the debt and debt service allocations. The bonded debt (which exceeds $5 billion) and debt service (half of the GLWA operating costs included in charges for services) is a critical issue as to funding party now and into the future.

    Unfortunately, the detailed accounting information in the subsidiary fixed asset ledger was not been properly maintained and did not tie to the control account in the general ledger – in some areas by upwards of a hundreds of millions of dollars. The subsidiary (detailed) fixed asset ledger had over 30,000 lines of fixed asset acquisitions cited. The fixed asset accounting practices created difficulties in identifying the cost of assets still remaining on the general ledger, which entity is using the asset, date placed in service and which entity funded the asset all of which his information necessary to assist in bifurcating the fixed assets to respective entity and for use in allocation debt and debt service costs so as to provide a basis for allocating the bond amounts and debt service to DWSD-R and GLWA into the future.

    In addition, there are other nuances that contributed to the difficulties surrounding the use of fixed asset values being the basis of the allocation of the debt and future debt service including:

    a) The debt included $547 million of SWAP termination bond proceeds whereby the loss was charged to operations in FY-2012. Said differently, there is SWAP debt on the balance sheet, but having no fixed assets associated with this transaction.

    b) There are assets that cannot be found in the asset records, but that are known to exist (GLWA / DWSD-R headquarters for example) and would be held by DWSD-R or GLWA.

    c) There are assets that are no longer in use (and thus, should have been written off) and / or where the asset control and use is in dispute. For example, the Oakland Macomb Interceptor Drainage District was still being carried on the records of DWSD in the original amount of $90 million in the preliminary fixed asset records leading up to the December 31, 2015 bifurcation. The DRMS system was abandoned by the City with the decision in FY-2015 to secure a new financial system yet over $20 million in net book value remained in the preliminary records as of December 31, 2015. Other examples could be provided as well.

    The Foster Group prepared numerous analyses over a two-year period on the fixed asset records and the cleansing of those records occurring during that period, with the latest preliminary memorandum dated March 28, 2017. Numerous meetings were held on the proxy process to be used in the debt and debt service allocations. In early June, a resolution to this matter was agreed to and discussed at the June 7, 2017 Board of Directors meeting and in a memorandum of The Foster Group dated June 6, 2017. The result was a shift for the FY-2018 budget of debt service previously charged to the GLWA in FY-2017 and prior years to that of DWSD-R in the amount of $2.8 million for water operations and $2.0 million for sewer operations, after factoring out the impact on DWSD-R for its share of common-to-all GLWA costs. The cost shift as treated as prospective only.

As noted previously, the one remaining issue is the amortization of the long-term debt assumed by GLWA and subsequently will be allocated to DWSD-R and suburban wholesale customers on an as yet to be determined basis (see prior discussions).

20) **Sewer Shares –** In 2012, the DWSD Board of Water Commissioners agreed to adopt a Rate Simplification process involving a fixed sewer shares allocation method over a three year period of time as a means of allocating sewer costs to common-to-all customers. While the method of cost allocation changed from a flow only approach to a hybrid method of considering both flow and strength of flow (pollutants in the sanitary flow), much of the underlying data necessary to allocate with any precision the costs to communities required high-level professional estimates and judgments.

    Significant pressures to ensure stability in rates and charges resulted in a negotiated agreement with a commitment to collect and review the data for the next round of sewer share allocation changes. The City / GLWA agreement involving services incorporated the commitment to review the methods and assemble data relating to sewer shares for the operating budget starting in FY-2018. The GLWA staff presented a preliminary sampling plan for the next round of Sewer SHARES allocation starting in 2021, but the plan has been postponed given a belief that additional research on how other utilities address the allocation process was handled.

    The original timeframe for launch of the sampling plan was spring 2018, but with each passing month the likelihood of the launch of a sampling plan in calendar 2018 wanes as certain tests should be conducted by season. Failing to address this matter could place GLWA in the very position of 2016 – too much work to be conducted in too little time to do so resulting in having to rely on the 'best available data' rather than data well thought out based on a plan implemented in a thoughtful manner.

    In calendar 2016, a task force was launched to fulfill the above commitment to review the prior Sewer SHARES allocation assumptions comprised of technicians representing the communities to collect data and update the prior three-year study for the sewer shares allocation. Engineering and financial studies were conducted in consideration of revising the Rate Simplification sewer shares between the retail and wholesale customers. A lengthy report was issued in March 2017 and two minority reports were issued challenging the matters, estimates and assumptions used in the engineering study. Many questions remained unanswered. The details are far too lengthy to be discussed in this listing of business issues.

    After much discussion of these matters and in consideration of positions taken on the debt and debt service allocations noted above, the settlement included moving $12.5 million in sewer costs from the DWSD-R sewer operations to those of the GLWA common-to-all customers. The agreement would be phased in over a two-year process (50% in each year) and last until the next round of sewer shares would be considered for the FY-2021 budget. Commitments were received to establish a thoughtful sampling plan starting in calendar 2018 towards avoiding many of the questions and issues contributing to concerns by many parties of interest in the Sewer Shares accepted for the three year period 2018 to 2020.

    Additional factors beyond simply flow and strength of flow will be included in the next study for FY-2021 to FY-2023, including peaking / capacity and grit issues.

21) **Budget Stabilization Fund (BSF) –** The BSF was incorporated in the GLWA / DWSD-R shared services agreement and involves a restricted asset account to be held by GLWA comprised of amounts funded by DWSD-R. The purpose was to ensure that there were sufficient accounts receivable collections by DWSD-R to cover the debt service and operating commitments of GLWA in the coming years.

The BSF impacts only the DWSD-R rates and charges as the collections from their retail customers improve or deteriorate. Over the past 18 months, the collection rates for retail customers has improved and the original amounts thought to be necessary to be set aside in GLWA for the BSF has declined. The suburban interests offered up an alternative formula that would have served to eliminate much of the complexity of the formula (particularly during the time of budget preparation and prior to the release of audit reports), but DWSD-R has requested to keep the formula intact.

The effect of this matter on the FY-2018 suburban wholesale customer's operating budget is nil. DWSD-R will not be required to fund additional moneys into the BSF for FY-2018 and will be entitled to a return of moneys held by GLWA from previous depositions (roughly $2.5 million). With the improved collection rate by the City, it is believed that adequate reserves will remain in the BSF to cover any unforeseen reduction in collections by the City.

22) **Accumulated Deficit at December 31, 2015** - The combined accumulated deficit of water and sewer funds is $666 million as of June 30, 2015 (including both DWSD-R and GLWA), including the recorded pension adjustments for GASB No. 68. At December 31, 2015, the combined accumulated deficit was $648.9 million (sewer – net investment in capital assets of $155.2M + unrestricted deficit of $171.3m; water – net investment in capital assets of $224.1M plus unrestricted deficit of $98.3M). A substantial part of this accumulated deficit represents the recording of the net pension liability and other related accounts but cannot be determined from a review of the audited financial statement in any detail that would split DWSD amounts from City amounts.

At present, the DWSD-R financial statements for FY-2016 have assumed no financial responsibility for the accumulated deficit, leaving the responsibility for resolving this matter to GLWA. The DWSD-R essentially is provided a 'fresh' start with a zero-equity position or a nominal amount given some assets have already been transferred over to DWSD-R in calendar 2016. In doing so, the fiscal responsibility of a combined system at December 31, 2015 would be $327.9 million to resolve ($224.2 million water / $103.7 million sewer), with DWSD-R having only an allocated portion of the common-to-all operations.

At the time of the presentation of the January 1, 2016 financial statements for GLWA (e.g. opening balance sheet), the accumulated deficit ***for book purposes*** is eliminated through upward adjustments of the fixed assets from historical cost to essentially fair market value as defined by the Government Accounting Standards Board (and other adjustments). GASB requires these adjustments for transactions such as the DWSD / GLWA split but, had no adjustments been provided, the GLWA would have reflected a combined accumulated deficit on an historical basis of roughly $648.9 million. The historical costs will be used for the calculation of rates / charges in FY-2019 and beyond – meaning the GASB impacts will have to be culled out of the audited financial statements as part of this upcoming rates / charge season and rates / charges adjusted upwards to cover the prior deficits in the water and sewer operations.

With the completion of the December 31, 2015 financial statements and adherence to GASB requirements, the effect of these historical losses giving rise to the accumulated deficit have been buried in the write-up of the fixed assets effective January 1, 2016 and other net assets. The accumulated deficit still remains in that the working capital (current assets such as cash and receivables and current liabilities such as vendor payables) would not have changed and the economic strength of the balance sheet remains unchanged on the first day of GLWA operations.

GNERAL RETIREMENT SYSTEM - FINANCIAL ANALYSES
June 8, 2017

EXHIBIT A

		Year Ended June 30, 2016		
		As State in 2016 CAFR	One -Time Transactions	Proforma Net - On-going
Beginning equity		$ 2,131,278,211	$ -	$ 1,933,541,307
Additions:				
Interest / dividends, less investment expense	B	19,902,625	103,275,375	123,178,000
Net decrease in fair market value	B	(33,163,905)	33,163,905	-
Employer contributions		71,905,829	-	71,905,829
DIA advance contribution on fund-raising	C	32,886,828	(32,886,828)	-
Other income		6,756,516	-	6,756,516
Total additions		98,287,893	103,552,452	201,840,345
Deductions:				
Retirees' pension and annuity benefits		(242,470,451)	-	(242,470,451)
Member refunds and withdrawals		(49,811,728)	-	(49,811,728)
Administrative expenses		(3,742,618)	-	(3,742,618)
Total deductions		(296,024,797)	-	(296,024,797)
Net reduction in equity		(197,736,904)	103,552,452	(94,184,452)
ENDING EQUITY		$ 1,933,541,307	$ 103,552,452	$ 1,839,356,855

Note A - the information contained above and in the below tables has been extracted from the audited financial statements of the General Retirement System for the year cited.
Note B - the net decrease in fair market value has been eliminated for the proforma column presentation and replaced with the projected actuarial assumption for income of 6.75% against its respective parts base of beginning equity plus the product of contributions and other income, less total deductions divided by two times the 6.75% - which equals $123,178,000.

		In Millions			
		Benefits Paid	Withdrawals	Total	Net Addition (Deduction) from Operations
FY-2016		$ 242.5	$ 49.8	$ 292.3	$ (197.7)
FY-2015		293.2	44.3	337.5	117.7
FY-2014		253.7	144.1	397.8	(83.8)
FY-2013		246.6	126.5	373.1	(59.8)
FY-2012		230.9	156.9	387.8	(262.7)
		$ 1,266.9	$ 521.6	$ 1,788.5	(486.3)
Less a 'one-time' distributions from the State in connection with the 'Grand Bargain' - Note 1:					
FY-2016	1				(32.9)
FY-2015	1				(103.8)
Cumulative 5-year net reduction in equity arising from on-going operations					$ (623.0)
Average over a 5-year period		$ 253.38	$ 104.32	$ 357.70	$ (124.60)

Note 1 - in FY-2016 the DIA advance paid the GRS for its funding commitment (discounted) through FY-2023. No further DIA commitments of any significance are expected in the future. In FY-2015, the State and non-profit entities provided a one-time contribution for their commitments under the Plan of Adjustment.

Combined Plan for the General Retirement System of the City of Detroit

Statement of Fiduciary Net Position
June 30, 2016

	Component II Plan (Legacy) Defined Benefit Fund	Component II Plan (Legacy) Income Stabilization Fund	Component I Plan (Hybrid)	Total Combined Plan
Assets				
Cash and cash equivalents (Note 3)	$ 114,972,767	$ 2,606,554	$ 12,813,262	$ 130,392,583
Investments - At fair value (Notes 3 and 4):				
Global equities	843,597,171	-	12,263,170	855,860,341
Global fixed income	98,577,668	-	1,432,912	100,010,580
Real assets	390,579,155	-	6,042,403	396,621,558
Private equity	101,770,053	-	1,479,190	103,249,243
Diversifying strategies	248,182,711	-	3,607,571	251,790,282
Receivables:				
Accrued investment income	1,328,554	-	16,784	1,345,338
Receivables from investment sales	10,219,977	-	148,558	10,368,535
Other receivable	683,705	-	-	683,705
ASF recoupment receivable (Note 1)	104,575,110	-	-	104,575,110
Notes receivable from participants	8,179,203	-	-	8,179,203
Restricted assets (Note 1)	24,803,369	-	359,834	25,163,203
Cash and investments held as collateral for securities lending (Note 3):				
Asset-backed securities	25,924,215	-	376,833	26,301,048
Repurchase agreements	177,644	-	2,582	180,226
Corporate floating rate	58,948,338	-	856,869	59,805,207
Capital assets (Note 1)	202,672	-	-	202,672
Total assets	2,032,722,312	2,606,554	39,399,968	2,074,728,834
Liabilities				
Accrued expenses	2,819,104	-	1,184,116	4,003,220
Payables for investment purchases	10,963,346	-	159,363	11,122,709
Due to the City of Detroit	454,105	-	454,105	908,210
Amounts due broker under securities lending arrangements (Note 3)	84,294,535	-	1,225,299	85,519,834
Other liabilities	649,915	-	123,530	773,445
Total liabilities	99,181,005	-	3,146,413	102,327,418
Net Position - Restricted for pensions	$ 1,933,541,307	$ 2,606,554	$ 36,253,555	$ 1,972,401,416

Combined Plan for the General Retirement System of the City of Detroit

Statement of Changes in Fiduciary Net Position

	Year Ending				
	June 30, 2016				June 30, 2015
	Component II Plan (Legacy)				
	Defined Benefit Fund	Income Stabilization Fund	Component I Plan (Hybrid)	Total Combined Plan	Total
Additions					
Investment income:					
Interest and dividends	$ 29,131,909	$ 25,008	$ 440,665	$ 29,597,582	$ 24,881,986
Net (decrease) increase in fair value of investments	(33,163,905)	-	(396,860)	(33,560,765)	78,421,363
Less investment expense	(9,229,284)	-	(132,773)	(9,362,057)	(11,017,368)
Net investment (loss) income	(13,261,280)	25,008	(88,968)	(13,325,240)	92,285,981
Securities lending income:					
Interest and dividends	487,524	-	7,650	495,174	288,204
Net unrealized gain on collateralized securities	323,209	-	4,710	327,919	538,795
Net securities lending income	810,733	-	12,360	823,093	826,999
Contributions:					
Employer	71,905,829	1,689,857	9,048,831	82,644,517	96,157,790
Employee	-	-	12,559,259	12,559,259	13,366,105
State and foundations (Note 2)	32,886,828	-	-	32,886,828	103,800,000
Total contributions	104,792,657	1,689,857	21,608,090	128,090,604	213,323,895
ASF recoupment interest (Note 1)	4,585,453	-	-	4,585,453	132,529,998
Other income	1,360,330	-	6,586	1,366,916	2,750,373
Total additions - Net	98,287,893	1,714,865	21,538,068	121,540,826	441,717,246
Deductions					
Retirees' pension and annuity benefits	242,470,451	705,006	40,162	243,215,619	253,533,495
Member refunds and withdrawals	49,811,728	-	2,247,052	52,058,780	44,321,041
General and administrative expenses	3,742,618	-	3,094,197	6,836,815	6,098,785
Total deductions	296,024,797	705,006	5,381,411	302,111,214	303,953,321
Net (Decrease) Increase in Net Position Held in Trust	(197,736,904)	1,009,859	16,156,657	(180,570,388)	137,763,925
Net Position Restricted for Pensions - Beginning of year	2,131,278,211	1,596,695	20,096,898	2,152,971,804	2,015,207,879
Net Position Restricted for Pensions - End of year	**$ 1,933,541,307**	**$ 2,606,554**	**$ 36,253,555**	**$ 1,972,401,416**	**$ 2,152,971,804**

The Notes to Financial Statements are an Integral Part of this Statement.