RESOLUTION ADOPTING AND IMPLEMENTING RATE SIMPLIFICATION

Whereas, in the Case of United States v City of Detroit, *et al*, USDC No. 77-71100, the Court sanctioned several agreements resolving wastewater disposal rate disputes between DWSD and its customers; and

Whereas in United States v City of Detroit, *et al*, Judge Cox ordered that the Detroit Water & Sewerage Department (DWSD) implement certain terms of those settlement agreements in its wholesale Wastewater Disposal Services contracts, subject to the parties' agreement to modify those terms; and

Whereas, DWSD, representatives from DWSD's wholesales customer communities, and the representative of DWSD's retail customers have worked collaboratively to further clarify the rate settlement agreements and simplify the methodology for the establishment of future rate recommendations; and

Whereas, the parties reached an agreement on a simplified methodology for the establishment of future sewerage rate recommendations that is consistent with the Court's ruling in United States v City of Detroit, *et al*, and provides greater transparency and efficiency in establishing rate recommendations for DWSD's future wastewater disposal services; and

Whereas, this rate simplification methodology includes a methodology for periodic reevaluation, adjustment, and response to material changes in a customer community that may impact its rate share; and

Whereas, DWSD has engaged in various outreach meetings and communications with the representatives of its customer communities to ensure that they were aware of and had an opportunity for input in the development of the rate simplification principles, methodology, and process; and

Whereas, the Board of Water Commissioners has received a summary of customer outreach efforts prepared by Project Innovations relative to rate simplification; and

Whereas, the Legal Committee of the Board of Water Commissioners has held two open public meetings to discuss this process and received comments from interested parties; and

Whereas, the Board of Water Commissioners held an open public workshop at which the rate simplification principles, methodology, and process were discussed; and

Whereas, the Board of Water Commissioners has reviewed materials including recommendations from the Rate Simplification Work Group, a Pro Forma and proposed initial rate shares from the Foster Group, as well as a proposed revised Exhibit E for use in its

wholesale customer Wastewater Disposal Services contracts recommended by DWSD's counsel; and

Whereas, the Board of Water Commissioners has determined that the proposed rate simplification principles, methodology, and process (collectively 2013 Rate Simplification) are in the best interests of DWSD's customers,

BE IT RESOLVED THAT:

1) The Detroit Water and Sewerage Department, Board of Water Commissioners adopts the 2013 Rate Simplification for use in establishing future sewerage shares and rate recommendations for its customers.

2) DWSD staff is directed to utilize 2013 Rate Simplification, including the initial shares developed by the Foster Group in its proposals for future sewerage rates submitted to the Board of Water Commissioners.

3) Exhibit E as submitted to this Board is approved for use as a part of DWSD's wholesale Wastewater Disposal Services contract.

4) DWSD shall post on its website:

    A) The recommendations from the Rate Simplification Work Group,
    B) The Pro Forma and Initial Rate Period Shares memorandum from the Foster Group, and
    C) Its form of wholesale customer Wastewater Disposal Services contract including the revised Exhibit E approved by this resolution.

5) The Director of DWSD is authorized to take such other action as may be necessary to accomplish the intent of this vote.

Detroit Water & Sewerage Department

SEWER RATE SIMPLIFICATION 2013

ATTACHMENTS

1. Resolution Adopting and Implementing Rate Simplification

2. Exhibit E- Clean Version

3. Exhibit E- Bluelined Version

4. Attachment No. 1 Rate Simplification Recommendations

    - Exhibit 1: Initial Rate Period Shares
    - Exhibit 2: Process to Address Customer's Request for Interim Share Changes
    - Exhibit 3: Rate Simplification Pro Forma

5. Attachment No. 2 Agreement to Amend Combined Sewer Overflow (CSO) List

CITY OF DETROIT
WATER AND SEWERAGE DEPARTMENT
BOARD OF WATER COMMISSIONERS

735 RANDOLPH STREET
DETROIT, MICHIGAN 48226-2830
PHONE 313•224•4704
FAX 313•224•6067
WWW.DETROITMI.GOV

Agenda of November 27, 2013

Item No.13-0516
Resolution

TO: The Honorable
Board of Water Commissioners
City of Detroit, Michigan

FROM: Sue F. McCormick, Director
Water and Sewerage Department

DATE: November 27, 2013

RE: **Resolution Adopting and Implementing Rate Simplification**

Motion: Upon recommendation of Sue F. McCormick, Director, that the Board of Water Commissioners **adopts the attached Resolution Adopting and Implementing Rate Simplification** and also authorizes the Director to take such other action as may be necessary to accomplish the intent of this vote.

This recommendation was considered by the Board of Water Commissioners and action taken as noted below.

BOARD OF WATER COMMISSIONERS:

ACTION:_____ **DATE:**_____

BY:_____
Sue F. McCormick, Director

RESOLUTION ADOPTING AND IMPLEMENTING RATE SIMPLIFICATION

Whereas, in the Case of United States v City of Detroit, *et al*, USDC No. 77-71100, the Court sanctioned several agreements resolving wastewater disposal rate disputes between DWSD and its customers; and

Whereas in United States v City of Detroit, *et al*, Judge Cox ordered that the Detroit Water & Sewerage Department (DWSD) implement certain terms of those settlement agreements in its wholesale Wastewater Disposal Services contracts, subject to the parties' agreement to modify those terms; and

Whereas, DWSD, representatives from DWSD's wholesales customer communities, and the representative of DWSD's retail customers have worked collaboratively to further clarify the rate settlement agreements and simplify the methodology for the establishment of future rate recommendations; and

Whereas, the parties reached an agreement on a simplified methodology for the establishment of future sewerage rate recommendations that is consistent with the Court's ruling in United States v City of Detroit, *et al*, and provides greater transparency and efficiency in establishing rate recommendations for DWSD's future wastewater disposal services; and

Whereas, this rate simplification methodology includes a methodology for periodic reevaluation, adjustment, and response to material changes in a customer community that may impact its rate share; and

Whereas, DWSD has engaged in various outreach meetings and communications with the representatives of its customer communities to ensure that they were aware of and had an opportunity for input in the development of the rate simplification principles, methodology, and process; and

Whereas, the Board of Water Commissioners has received a summary of customer outreach efforts prepared by Project Innovations relative to rate simplification; and

Whereas, the Legal Committee of the Board of Water Commissioners has held two open public meetings to discuss this process and received comments from interested parties; and

Whereas, the Board of Water Commissioners held an open public workshop at which the rate simplification principles, methodology, and process were discussed; and

Whereas, the Board of Water Commissioners has reviewed materials including recommendations from the Rate Simplification Work Group, a Pro Forma and proposed initial rate shares from the Foster Group, as well as a proposed revised Exhibit E for use in its

wholesale customer Wastewater Disposal Services contracts recommended by DWSD's counsel; and

Whereas, the Board of Water Commissioners has determined that the proposed rate simplification principles, methodology, and process (collectively 2013 Rate Simplification) are in the best interests of DWSD's customers,

BE IT RESOLVED THAT:

1) The Detroit Water and Sewerage Department, Board of Water Commissioners adopts the 2013 Rate Simplification for use in establishing future sewerage shares and rate recommendations for its customers.

2) DWSD staff is directed to utilize 2013 Rate Simplification, including the initial shares developed by the Foster Group in its proposals for future sewerage rates submitted to the Board of Water Commissioners.

3) Exhibit E as submitted to this Board is approved for use as a part of DWSD's wholesale Wastewater Disposal Services contract.

4) DWSD shall post on its website:

    A) The recommendations from the Rate Simplification Work Group,
    B) The Pro Forma and Initial Rate Period Shares memorandum from the Foster Group, and
    C) Its form of wholesale customer Wastewater Disposal Services contract including the revised Exhibit E approved by this resolution.

5) The Director of DWSD is authorized to take such other action as may be necessary to accomplish the intent of this vote.

EXHIBIT E

Modified List of Relevant Ratemaking Terms

A – Rate Making Process

1. User Charge System. Not less than every two years, DWSD shall review its User Charge System to assure that it accomplishes the requirements set out in 40 C.F.R. §35.929-2(b).

2. Local User Charge System. Each wholesale customer agrees that it shall adopt and enforce, and shall cause each of its local governmental customers for sewage treatment and disposal services to adopt and enforce rules and regulations to implement and maintain a revenue system whereby, as a minimum, the operation, maintenance and replacement portion of DWSD's rates are distributed proportionately to each user or user class that is tributary to DWSD's treatment works. The rules and regulations shall provide for monitoring of commercial, governmental and industrial users and shall be consistent with the monitoring rules and regulations of the City of Detroit. The Board shall have the right under said rules and regulations to audit all monitoring activities including the right to perform monitoring tests itself to verify the accuracy of monitoring results

3. Future Ratemaking Information.

a. Whenever DWSD undertakes any study which may result in the revision of rates to its wholesale customers, it shall notify its wholesale customers and provide those customers, their agents, consultants and attorneys, any final reports prepared in the course of such study and, upon written request, any interim or preliminary reports, and meet with the contracting parties to explain and discuss the reports being provided. When implementing any change in sewage treatment rates, the Board and DWSD shall comply with the applicable public participation requirements of 40 CFR Part 25, and MCL 117.5e(b). The Board shall hold a public hearing prior to the adoption of sewage treatment rates. No later than fifteen (15) days prior to the Board's hearing, and upon request, DWSD shall provide contract customers with the rate report and supporting documents to be considered by the Board.

4. Commitment to Collaborative Process. DWSD shall establish and continue a customer outreach and involvement process to facilitate a cooperative working partnership between DWSD and First Tier Customers based on the free flow of information regarding financial conditions and operational functions. The Steering Committee, with its subcommittees, is established as the forum in which discussion and development of recommendations to DWSD regarding wastewater system operation, maintenance, rates, and best practices occurs. The parties agree that the rate making process will incorporate guidance and input from the Steering Committee and its work groups.

B – <u>Revenue Requirements</u>

1. Revenue Requirements. Revenue requirements shall be based upon the finances required to meet all operating, maintenance, capital requirements including debt financing and debt service coverage required by bond covenant, ordinance, or Board policy, and any obligations imposed by law, and shall reflect not only recent cost experience but also a recognition of the reasonably estimated future cost levels during the period for which the rates are being established.

a. <u>Operating and Maintenance Expenses of the System</u>.

(i) Operating and maintenance expenses shall include replacement of process

equipment, accessories, or appurtenances which are necessary to maintain the capacity and performance for which the treatment works is designed and constructed.

(ii) The rate for operation and maintenance expenses, including replacement, shall include surcharges to be applied to discharges of individual users whose loadings of specified pollutants exceed normal loadings. The Board shall specify the pollutants that may be surcharged and shall define normal loading thresholds of each pollutant. The rate shall conform to Section 204(b) (1) (A) of Public Law 92-500, as amended, and regulations of the United States Environmental Protection Agency, being 40 CFR 35.929 through 35.929-3.

b. Capital Financing. DWSD shall adopt a five-year financial plan and a five-year capital improvement plan for the expansion, renewal and replacement of common use major capital assets and improvements and shall update the plans at least bi-annually. The plans shall provide for the financing of major capital assets and improvements with a mix of revenue bonds and revenue-financed capital designed to accomplish the financial goals established by the Board, considering public water and sewer utility financial benchmarks, including, without limitation, unrestricted net assets, rate stability, strong bond ratings and a long-term goal of achieving reasonable debt service coverage levels and reasonable levels of debt service as a percentage of total revenue.

c. Depreciation. To the extent that the "Cash Basis" of ratemaking is applied in future rates, revenue requirements shall not include a depreciation expense element, which, together with a rate of return and provision for operation and maintenance expense, would generate revenues in excess of system revenue requirements including coverage.

2. Amended Look-Back Process: Adjustments to Prospective Revenue Requirements.

DWSD shall review the differences in each class cost pool between the projected revenue requirement for a rate year and the actual revenue requirement for that rate year to determine potential adjustments to prospective allocations and budgets/revenue requirements for that cost pool according to the procedures set forth in **Attachment 1**, Rate Simplification Recommendations, November 20, 2013. The purpose of this review will be to avoid material deviations from the principles in Section D(1) below between projected and actual revenue requirements over the medium term. To the extent that the Board determines that a material variance exists in a cost pool, the Board may, at its discretion, modify prospective revenue requirements in one or more subsequent rate years to eliminate the variance.

3. Bad Debt Expense:

a. A "bad debt expense" is a delinquency by a DWSD customer that is classified as "bad debt expense" pursuant to then applicable accounting procedures.

b. Quarterly, DWSD will provide to the wholesale customers current information on individual delinquencies in payment of wholesale class bills. On or before January 1 each year, DWSD will provide the wholesale customers a statement of the amount of wholesale bad debt expense to be included in the prospective rates for each delinquent wholesale customer and the amount of bad debt expense from prior rate years for each such delinquent customer.

c. DWSD shall review the differences between the projected bad debt expense assigned to specific customer classes (noted below) in a rate year and the actual bad debt expense incurred for that rate year. Any variance between the projected bad debt expense and the actual bad debt expense incurred for that year shall be incorporated into the revenue requirement for the next-commencing rate year to insure that revenue shortfalls due to nonpayment of sewer charges are recovered.

d. For purposes of this clause, specific customer classes are defined as:

	Bad Debt Expense	Responsible Customer Class
1.	Detroit Retail Customers	Detroit Retail Customers
2.	Wholesale Contract Customers	Wholesale Contract Customers
3.	Surcharge Customers	Surcharge Customers
4.	Wayne County Hwy Drainage	Wayne County Hwy Drainage
5.	Michigan DOT Hwy Drainage	Michigan DOT Hwy Drainage
6.	Industrial Waste Control	Industrial Waste Control

e. DWSD shall use all commercially reasonable efforts, which may include legal action, to recover all delinquent wholesale billings before they are classified as bad debt expense and charged to the wholesale customer class.

f. Delinquencies that have been classified as bad debt expense shall continue to be charged against and shown on the delinquent wholesale customer's bill until such time as the delinquency is paid or released pursuant to subsection 3(g) below. Payments made by a wholesale customer with regard to its delinquent accounts after they have been charged as a bad debt expense to the wholesale customer class shall be credited to the wholesale customer class' revenue requirement in the rate year following such payment. Payments received from delinquent wholesale customers shall be applied to the oldest unpaid invoice, whether or not the invoice has been classified as a bad debt expense.

g. DWSD shall not compromise, release or discharge part or all of its claims against a wholesale customer when the delinquency has been charged as a bad debt expense against the wholesale customer class without the consent of two thirds in number of the representatives of Wayne, Oakland and Macomb Counties authorized to execute and carry out the terms of the Wastewater Disposal Services Contract in the exercise of their commercially reasonable judgment.

h. If DWSD has not instituted legal action to collect a wholesale customer delinquency after it has been charged to the wholesale customer class, at the request of one or more wholesale customers, DWSD shall assign to the wholesale customer class (or such member(s) of that class who agree to pursue such claims) that claims(s) against the delinquent wholesale customer on behalf of DWSD. If one or more wholesale customers request that the right to prosecute a claim be assigned to them, DWSD shall notify all wholesale customers of the requested assignment, the nature and amount of the claim, the party or parties to whom the claim is assigned and that the other wholesale customers may have the right to appear or intervene in the action. The customers who are assigned the claim shall pursue the claim using common counsel. The wholesale customers who pursue such claims may recover their reasonable attorneys and other expenses incurred in pursuing the claim(s) from the sums recovered with the balance of any recover paid over to DWSD for the benefit of the wholesale customer class. The wholesale customers to whom DWSD has assigned its right to pursue a claim(s) on behalf of its wholesale customers shall not compromise, release or discharge part or all of the claim(s) without the consent of two thirds in number of the representatives of Wayne, Oakland and Macomb Counties as well as DWSD's Board of Water Commissioners, in the exercise of their commercially reasonable judgment.

i. Any wholesale customer that through its delinquency has created a bad debt expense to DWSD, regardless of whether that bad debt has been charged as an expense against the wholesale customer class, shall not receive any rate benefits or credits pertaining to the wholesale class at large that result from calculations under section B(2) so long as the delinquency creating the bad debt expense remains unpaid or undischarged.

j. The Board shall develop rules and procedures as necessary to implement and carry out the provisions of article B.3. of this Exhibit E.

C – Payments to the City of Detroit

1. Payment for Indirect Benefits or Services. Following the computation of rates for customers residing or located within the City of Detroit and customers residing or located without the City of Detroit, such rates shall be further adjusted by deducting from the revenue requirement for customers within the City of Detroit and added to the revenue requirement for customers without the City of Detroit an amount determined as follows:

a. For the fiscal year 1979, the sum of $1 million. For each fiscal year thereafter, such amount shall be increased by 5%, determined on a compounded basis. This adjustment is known as "Adjustment A" in the rate protocol.

b. This payment shall be made and the rates so adjusted as a payment to reflect the cost of indirect benefits or services provided by the City of Detroit to DWSD for common use facilities within the City of Detroit, such as police and fire protection, the risk of tort liability, the loss of tax base that the City loses as a result of the Department's tax exemption, and the fact that the suburbs receive sewage treatment without having to devote any of their land to a tax free utility. c. In the event that the City of Detroit shall at any time hereafter render billings or accounting statements for indirect services to the DWSD such as police and fire protection, risk of tort liability, loss of tax base or any other type of contribution in lieu of taxes with the effect that such billings or statements become part of the DWSD budget for ratemaking purposes, then the amount of such charges allocated or apportioned to the contracting customers shall be deducted from the amount determined in subsection (a) above, and shall in no event exceed the amount determined pursuant to subsection (a) above.

d. DWSD shall allocate the amount charged to the customers residing or located without the City of Detroit for payment for indirect benefits and services set forth in subsections (a)-(c) in the same manner in which it allocates treatment costs.

2. Payment for Direct Services. DWSD may continue to include in its rates charges for direct services which the City currently renders and bills to DWSD. Such "direct services" shall be limited to the kind of services historically provided by offices, departments or agencies of the City of Detroit such as various kinds of licenses and permits, electricity, steam, paving required by DWSD's facilities or projects, vehicles and rubbish pickup and those which were included in the DWSD budget for fiscal 1978. No additional charges may be made for "direct services" provided by other additional city offices, departments and/or agencies without the prior agreement of the contracting parties. Such agreement shall not be unreasonably denied or delayed should it appear that the particular service or services result in a legitimate, direct benefit to system and its customers.

D – Allocation of Costs of Service

1. Uniform Allocations of Costs Incurred. DWSD shall recover costs incurred by the system by instituting rates which assign, allocate, and apportion such costs to all ratepayers on the basis of principles uniformly applicable to all, it being the intention of the parties that such rates (whether designed on the utility or cash basis) will, as nearly as is practical, recover from each customer class the respective costs of providing service regardless of the ratepayer's location. In particular:

a. If DWSD implements rates based upon a system of charging a percentage rate of return on net asset or capital structure rate base, (through the use of the so-called utility basis of rate making), there shall be no differential in the rate of return charged to customers residing or located within the City of Detroit and customers located without the City of Detroit. Nothing herein contained shall prohibit DWSD from designing its rates on the so-called cash basis.

b. Should DWSD use the cash basis to allocate capital costs in any future rate study, the allocation of debt service costs to all customers or facilities shall be based upon the system weighted average interest rate at the time.

c. DWSD shall use surcharges shall to recover incremental revenue requirements incurred in treating sewage which, at the point of discharge, contains specified pollutants in concentrations exceeding those of normal domestic sewage~~,~~ as defined by the Board.

d. All revenue requirements other than those revenue requirements recovered by surcharges pursuant to subsection (1)(c) may be recovered by volume alone, or by volume and surcharges, or by any method which provides a distribution of costs reasonably related to the service provided.

e. The parties' current plan (at the time of this agreement) for achieving the principles set forth in this Section is set forth in **Attachment 1**. Consistent with Section A(2) of this agreement, the parties, by mutual agreement, may modify **Attachment 1** to reflect new information and approaches to achieving the principle set forth in Section D(1).

2. (17) DWSD Combined Sewer Overflow (Wet Weather Facilities).

a. Certain new wet weather facilities being constructed or to be constructed by DWSD to alleviate combined sewer overflows from its wastewater transportation, conveyance and treatment system contain or will contain wet weather flows generated from both inside and outside the City of Detroit. DWSD shall charge customers within the City of Detroit 83% and customers outside the City of Detroit 17% of the capital costs and costs incurred in the operation and maintenance of such facilities. DWSD shall allocate the 17% of such capital and operation and maintenance costs charged to customers outside the City of Detroit consistent with **Attachment 2**, Agreement to Revise CSO Project List.

b. **Attachment 2** provides a description of the new wet weather facilities, referred to in subsection (2)(a) above, that are currently under construction or to be constructed by DWSD and their estimated ~~c~~osts. Costs associated with improvements to facilities at the wastewater treatment plant, also listed on **Attachment 2**, will continue to be allocated on a common-to-all basis. Costs associated with Detroit-only projects, also listed on **Attachment 2**, will be charged to Detroit retail customers only. If DWSD determines that it is reasonable, appropriate or necessary to construct additional wet weather facilities in the future that will serve wet weather flows generated inside and outside of the City of Detroit, each contract customer reserves the right to contest its respective allocation of costs.

E – Evaluation of Wastewater Flows

DWSD shall continue ongoing technical review of wastewater flows in the DWSD system to establish and maintain wastewater contribution data that will support the proportional allocation of costs as set forth in D(1). The parties agree that the wastewater flow elements of ratemaking terms under prior agreements, including the allocation of infiltration and inflow and the application of a uniform overflow credit are accommodated in the sewer rate methodology set forth in **Attachment 1**. The scope of the ongoing review is intended to encompass the types of evaluations traditionally conducted utilizing the Greater Detroit Regional Sewer System ("GDRSS") model and related tools. The scope of ongoing review will be established from time to time by the Board, after consultation with the Steering Committee and related forums.

F – Industrial Waste Charges

Each wholesale customer agrees that it shall adopt and enforce, and shall cause each of the local

governmental units within its jurisdiction for sewage treatment and disposal service as provided by DWSD to adopt and enforce, rules and regulations pertaining to the use, design and construction of sewers, and the discharge of industrial or commercial wastes into sewers, where such sewers are tributary to DWSD's treatment works. Such rules and regulations shall be consistent with and at least as stringent as all applicable provisions of the pertinent ordinances adopted by the City of Detroit, these being the 1979 amendments to Chapter 56, Article I, and Chapter 56, Article III, of the Municipal Code of the City of Detroit as they may be adopted and amended from time to time. In the event any municipality or other governmental unit fails to adopt a required ordinance, or fails to diligently enforce the same, DWSD shall take appropriate action which may include suit in an appropriate court of general jurisdiction alleging such municipality's failure to adopt or enforce an ordinance. Should the court find, following a hearing on the merits, that the allegations in DWSD's petition are true, the parties agree that such court may, in such instance, grant appropriate injunctive relief against said municipality or any individual discharger located there, terminate the municipality's contractual right to discharge waste waters into DWSD's system and/or to grant DWSD such other relief as may be appropriate under the circumstances. These actions shall enable DWSD to:

i. Deny or condition new or increased contributions of pollutants or changes in the nature of pollutants, to the waste collection system by Industrial and Commercial Users. The terms "Industrial and Commercial" user shall mean those users defined in Section 56-6-3(H) and (P) of Detroit Ordinance No. 353-H of Chapter 56 of Article 6 passed on November 7, 1979 and as may be amended from time to time.

ii. Require compliance with applicable current future National Pretreatment Standards and other more restrictive requirements as may be imposed by DWSD promulgated by the U.S. EPA under the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq.

iii. Control, through permit, contract order, or similar means, the contribution to the waste collection system by Industrial and Commercial Users to ensure compliance with subsection (b) above.

iv. Require the development of compliance schedules by Industrial and Commercial Users for the installation and facilities required to meet applicable National Pretreatment Standards and other more restrictive requirements as may be imposed by DWSD.

v. Require the submission of notices and self-monitoring reports from Industrial and Commercial Users to assess and assure compliance with National Pretreatment Standards and other more restrictive requirements as may be imposed by DWSD.

vi. Carry out all inspection, surveillance and monitoring procedures necessary to determine, independent of information supplied by Industrial and Commercial Users, compliance or noncompliance with applicable National Pretreatment Standards and other more restrictive requirements as may be imposed by DWSD. The parties recognize that DWSD may contract with qualified parties to carry out the inspection, surveillance and monitoring procedures of this paragraph.

vii. Seek injunctive relief for noncompliance with National Pretreatment Standards and other more restrictive requirements as may be imposed by DWSD.

viii. Require Industrial and Commercial Users to install containment facilities to protect the treatment works from accidental spills of critical or hazardous materials

7. Contract Amendment for Industrial Waste Control.

a. All wholesale customers and all municipalities under contract to such wholesale

customers shall enter into amendments of the service contracts between or among them and DWSD to embody or incorporate the provisions that assure uniformity throughout the DWSD wastewater treatment system as required by applicable federal statutes and regulations.

b. DWSD's wastewater contracts shall be amended to include:

i. A process of diligent and uniform enforcement and implementation of the ordinances, rules and regulations to be adopted pursuant to Section IV(9) of the 1980 Settlement Agreement.

ii. A process to pass through to industrial customers amounts billed with respect to such customers for sewage surcharges and industrial cost recovery charges.

iii. Such provisions as are required to establish delegated or cooperative authority or procedures for inspection, monitoring, measurement, surveillance, enforcement and dispute resolution, with respect to prohibited discharges, sewage surcharges and industrial cost recovery charges.

EXHIBIT E

Modified List of Relevant Ratemaking Terms ~~*(Restructured and Simplified)*~~

A – Rate Making Process

~~1. (11)[1]~~ 1. User Charge System. Not less than every two years, DWSD shall review its User Charge System to assure that it accomplishes the requirements set out in 40 C.F.R. §35.929-2(b). ~~*Amended Consent Judgment, §I(C).*~~

2. ~~(23)~~ Local User Charge System. Each wholesale customer agrees that it shall adopt and enforce, and shall cause each of its local governmental customers for sewage treatment and disposal services to adopt and enforce rules and regulations to implement and maintain a revenue system whereby, as a minimum, the operation, maintenance and replacement portion of DWSD's rates are distributed proportionately to each user or user class that is tributary to DWSD's treatment works. The rules and regulations shall provide for monitoring of commercial, governmental and industrial users and shall be consistent with the monitoring rules and regulations of the City of Detroit. The Board shall have the right under said rules and regulations to audit all monitoring activities including the right to perform monitoring tests itself to verify the accuracy of monitoring results~~. *Order re Service Contract Amendments, Model Contract §2.*~~

3. ~~(5)(a)~~ Future Ratemaking Information.

a. Whenever DWSD undertakes any study which may result in the revision of rates to its wholesale customers, it shall notify its wholesale customers and provide those customers, their agents, consultants and attorneys, any final reports prepared in the course of such study and, upon written request, any interim or preliminary reports, and meet with the contracting parties to explain and discuss the reports being provided. When implementing any change in sewage treatment rates, the Board and DWSD shall comply with the applicable public participation requirements of 40 CFR Part 25, and MCL 117.5e(b). The Board shall hold a public hearing prior to the adoption of sewage treatment rates. No later than fifteen (15) days prior to the Board's hearing, and upon request, DWSD shall provide contract customers with the rate report and supporting documents to be considered by the Board. ~~*1978 Rate Settlement Agreement §5(E).*~~

4. Commitment to Collaborative Process. DWSD shall establish and continue a customer outreach and involvement process to facilitate a cooperative working partnership between DWSD and First Tier Customers based on the free flow of information regarding financial conditions and operational functions. The Steering Committee, with its subcommittees, is established as the forum in which discussion and development of recommendations to DWSD regarding wastewater system operation, maintenance, rates, and best practices occurs. The parties agree that the rate making process will incorporate guidance and input from the Steering Committee and its work groups.

B – Revenue Requirements

1. ~~(3)~~ Revenue Requirements. Revenue requirements shall be based upon the finances required to meet all operating, maintenance, capital requirements including debt financing and debt service coverage required by bond covenant, ordinance, or Board policy, and any obligations imposed by law,

~~[1] (#) indicates the paragraph number in the original version of Exhibit E.~~

and shall reflect not only recent cost experience but also a recognition of the reasonably estimated future cost levels during the period for which the rates are being established. ~~*1978 Settlement Agreement, §5(A).*~~

a. Operating and Maintenance Expenses of the System.

(i) Operating and maintenance expenses shall include replacement of process equipment, accessories, or appurtenances which are necessary to maintain the capacity and performance for which the treatment works is designed and constructed.

(ii) The rate for operation and maintenance expenses, including replacement, shall include surcharges to be applied to discharges of individual users whose loadings of specified pollutants exceed normal loadings. The Board shall specify the pollutants that may be surcharged and shall define normal loading thresholds of each pollutant. The rate shall conform to Section 204(b) (1) (A) of Public Law 92-500, as amended, and regulations of the United States Environmental Protection Agency, being 40 CFR 35.929 through 35.929-3. ~~*Order re Service Contract Amendments, Model Contract, §1.A(1)(b).*~~

b. Capital Financing. DWSD shall adopt a five-year financial plan and a five-year capital improvement plan for the expansion, renewal and replacement of common use major capital assets and improvements and shall update the plans at least bi-annually. The plans shall provide for the financing of major capital assets and improvements with a mix of revenue bonds and revenue-financed capital designed to accomplish the financial goals established by the Board, considering public water and sewer utility financial benchmarks, including, without limitation, unrestricted net assets, rate stability, strong bond ratings and a long-term goal of achieving reasonable debt service coverage levels and reasonable levels of debt service as a percentage of total revenue.

c. Depreciation. To the extent that the "Cash Basis" of ratemaking is applied in future rates, revenue requirements shall not include a depreciation expense element, which, together with a rate of return and provision for operation and maintenance expense, would generate revenues in excess of system revenue requirements including coverage. ~~*1978 Settlement Agreement, §5(C).*~~

2. ~~–~~ Amended Look-Back Process: Adjustments to Prospective Revenue Requirements.

DWSD shall review the differences in each class cost pool between the projected revenue requirement for a rate year and the actual revenue requirement for that rate year to determine potential adjustments to prospective allocations and budgets/revenue requirements for that cost pool according to the procedures set forth in **Attachment 1**, Rate Simplification Recommendations, November 20, 2013. The purpose of this review will be to avoid material deviations from the principles in Section D(1) below between projected and actual revenue requirements over the medium term. To the extent that the Board determines that a material variance exists in a cost pool, the Board may, at its discretion, modify prospective revenue requirements in one or more subsequent rate years to eliminate the variance.

3. ~~(15)~~ Bad Debt Expense:

a. A "bad debt expense" is a delinquency by a DWSD customer that is classified as "bad debt expense" pursuant to then applicable accounting procedures.

b. Quarterly, DWSD will provide to the wholesale customers current information on individual delinquencies in payment of wholesale class bills. On or before January 1 each year, DWSD will provide the wholesale customers a statement of the amount of wholesale bad debt expense to be included in the prospective rates for each delinquent wholesale customer and the amount of bad debt expense from prior rate years for each such delinquent customer.

c. DWSD shall review the differences between the projected bad debt expense assigned

to specific customer classes (noted below) in a rate year and the actual bad debt expense incurred for that rate year. Any variance between the projected bad debt expense and the actual bad debt expense incurred for that year shall be incorporated into the revenue requirement for the next-commencing rate year to insure that revenue shortfalls due to nonpayment of sewer charges are recovered.

d. For purposes of this clause, specific customer classes are defined as:

	Bad Debt Expense	Responsible Customer Class
1.	Detroit Retail Customers	Detroit Retail Customers
2.	Wholesale Contract Customers	Wholesale Contract Customers
3.	Surcharge Customers	Surcharge Customers
4.	Wayne County Hwy Drainage	Wayne County Hwy Drainage
5.	Michigan DOT Hwy Drainage	Michigan DOT Hwy Drainage
6.	Industrial Waste Control	Industrial Waste Control

~~*1995 Settlement Agreement, §4(a).*~~

e. DWSD shall use all commercially reasonable efforts, which may include legal action, to recover all delinquent wholesale billings before they are classified as bad debt expense and charged to the wholesale customer class.

f. Delinquencies that have been classified as bad debt expense shall continue to be charged against and shown on the delinquent wholesale customer's bill until such time as the delinquency is paid or released pursuant to subsection 3(g) below. Payments made by a wholesale customer with regard to its delinquent accounts after they have been charged as a bad debt expense to the wholesale customer class shall be credited to the wholesale customer class' revenue requirement in the rate year following such payment. Payments received from delinquent wholesale customers shall be applied to the oldest unpaid invoice, whether or not the invoice has been classified as a bad debt expense.

g. DWSD shall not compromise, release or discharge part or all of its claims against a wholesale customer when the delinquency has been charged as a bad debt expense against the wholesale customer class without the consent of two thirds in number of the representatives of Wayne, Oakland and Macomb Counties authorized to execute and carry out the terms of the Wastewater Disposal Services Contract in the exercise of their commercially reasonable judgment.

h. If DWSD has not instituted legal action to collect a wholesale customer delinquency after it has been charged to the wholesale customer class, at the request of one or more wholesale customers, DWSD shall assign to the wholesale customer class (or such member(s) of that class who agree to pursue such claims) that claims(s) against the delinquent wholesale customer on behalf of DWSD. If one or more wholesale customers request that the right to prosecute a claim be assigned to them, DWSD shall notify all wholesale customers of the requested assignment, the nature and amount of the claim, the party or parties to whom the claim is assigned and that the other wholesale customers may have the right to appear or intervene in the action. The customers who are assigned the claim shall pursue the claim using common counsel. The wholesale customers ~~to whom~~ that pursue such claims may recover their reasonable attorneys and other expenses incurred in pursuing the claim(s) from the sums recovered with the balance of any recover paid over to DWSD for the benefit of the wholesale customer class. The wholesale customers to whom DWSD has assigned its right to pursue a claim(s) on behalf of its wholesale customers shall not compromise, release or discharge part or all of the claim(s) without the consent of two thirds in number of the representatives of Wayne, Oakland and Macomb Counties ~~and~~as well as DWSD's Board of Water Commissioners, in the exercise of their commercially reasonable judgment.

i. Any wholesale customer that through its delinquency has created a bad debt expense

to DWSD, regardless of whether that bad debt has been charged as an expense against the wholesale customer class, shall not receive any rate benefits or credits pertaining to the wholesale class at large that result from calculations under section B(2) so long as the delinquency creating the bad debt expense remains unpaid or undischarged.

j. The Board shall develop rules and procedures as necessary to implement and carry out the provisions of article B.3. of this Exhibit E.

C – Payments to the City of Detroit

1. ~~(6)~~ Payment for Indirect Benefits or Services. Following the computation of rates for customers residing or located within the City of Detroit and customers residing or located without the City of Detroit, such rates shall be further adjusted by deducting from the revenue requirement for customers within the City of Detroit and added to the revenue requirement for customers without the City of Detroit an amount determined as follows: ~~*1978 Settlement Agreement, §11.*~~

a. For the fiscal year 1979, the sum of $1 million. For each fiscal year thereafter, such amount shall be increased by 5%, determined on a compounded basis. This adjustment is known as "Adjustment A" in the rate protocol. ~~*1978 Settlement Agreement, §11(A).*~~

b. This payment shall be made and the rates so adjusted as a payment to reflect the cost of indirect benefits or services provided by the City of Detroit to DWSD for common use facilities within the City of Detroit, such as police and fire protection, the risk of tort liability, the loss of tax base that the City loses as a result of the Department's tax exemption, and the fact that the suburbs receive sewage treatment without having to devote any of their land to a tax free utility. ~~*1978 Settlement Agreement, §11(B).*~~

c. In the event that the City of Detroit shall at any time hereafter render billings or accounting statements for indirect services to the DWSD such as police and fire protection, risk of tort liability, loss of tax base or any other type of contribution in lieu of taxes with the effect that such billings or statements become part of the DWSD budget for ratemaking purposes, then the amount of such charges allocated or apportioned to the contracting customers shall be deducted from the amount determined in subsection (a) above, and shall in no event exceed the amount determined pursuant to subsection (a) above. ~~*1978 Settlement Agreement, §11(C).*~~

d. DWSD shall allocate the amount charged to the customers residing or located without the City of Detroit for payment for indirect benefits and services set forth in subsections (a)-(c) in the same manner in which it allocates treatment costs. ~~*1978 Settlement Agreement, §11(E).*~~

2. ~~(7)~~ Payment for Direct Services. DWSD may continue to include in its rates charges for direct services which the City currently renders and bills to DWSD. Such "direct services" shall be limited to the kind of services historically provided by offices, departments or agencies of the City of Detroit such as various kinds of licenses and permits, electricity, steam, paving required by DWSD's facilities or projects, vehicles and rubbish pickup and those which were included in the DWSD budget for fiscal 1978. No additional charges may be made for "direct services" provided by other additional city offices, departments and/or agencies without the prior agreement of the contracting parties. Such agreement shall not be unreasonably denied or delayed should it appear that the particular service or services result in a legitimate, direct benefit to system and its customers. ~~*1978 Settlement Agreement, §11(D).*~~

D – Allocation of Costs of Service

1. ~~(4)~~ Uniform Allocations of Costs Incurred. DWSD shall recover costs incurred by the system by instituting rates which assign, allocate, and apportion such costs to all ratepayers on the basis of principles uniformly applicable to all, it being the intention of the parties that such rates (whether designed on the utility or cash basis) will, as nearly as is practical, recover from each customer class the respective costs of providing service regardless of the ratepayer's location. In particular:

a. If DWSD implements rates based upon a system of charging a percentage rate of return on net asset or capital structure rate base, (through the use of the so-called utility basis of rate making), there shall be no differential in the rate of return charged to customers residing or located within the City of Detroit and customers located without the City of Detroit. Nothing herein contained shall prohibit DWSD from designing its rates on the so-called cash basis. ~~*1978 Settlement Agreement, §5(D).*~~

b. Should DWSD use the cash basis to allocate capital costs in any future rate study, the allocation of debt service costs to all customers or facilities shall be based upon the system weighted average interest rate at the time. ~~*1978 Settlement Agreement, §5(D).*~~

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c. DWSD shall use surcharges shall to recover incremental revenue requirements incurred in treating sewage which, at the point of discharge, contains specified pollutants in concentrations exceeding those of normal domestic sewage~~,~~ as defined by the Board. ~~*Order re Service Contract Amendments, Model Contract, §1.B(4).*~~

d. All revenue requirements other than those revenue requirements recovered by surcharges pursuant to subsection (1)(c) may be recovered by volume alone, or by volume and surcharges, or by any method which provides a distribution of costs reasonably related to the service provided. ~~*1978 Settlement Agreement, §5(D); Order re Service Contract Amendments, Model Contract, §1.B(5).*~~

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e. The parties' current plan (at the time of this agreement) for achieving the principles set forth in this Section is set forth in **Attachment 1**. Consistent with Section A(2) of this agreement, the parties, by mutual agreement, may modify ~~**Attchment**~~**Attachment 1** to reflect new information and approaches to achieving the principle set forth in Section D(1).

2. (17) DWSD Combined Sewer Overflow (Wet Weather Facilities).

a. Certain new wet weather facilities being constructed or to be constructed by DWSD to alleviate combined sewer overflows from its wastewater transportation, conveyance and treatment system contain or will contain wet weather flows generated from both inside and outside the City of Detroit. DWSD shall charge customers within the City of Detroit 83% and customers outside the City of Detroit 17% of the capital costs and costs incurred in the operation and maintenance of such facilities. DWSD shall allocate the 17% of such capital and operation and maintenance costs charged to customers outside the City of Detroit consistent with **Attachment 2**, Agreement to Revise CSO Project List.

b. **Attachment 2** provides a description of the new wet weather facilities, referred to in subsection (2)(a) above, that are currently under construction or to be constructed by DWSD and their estimated ~~c~~osts. Costs associated with improvements to facilities at the wastewater treatment plant, also listed on **Attachment 2**, will continue to be allocated on a common-to-all basis. Costs associated with Detroit-only projects, also listed on **Attachment 2**, will be charged to Detroit retail customers only. If DWSD determines that it is reasonable, appropriate or necessary to construct additional wet weather facilities in the future that will serve wet weather flows generated inside and outside of the City of Detroit, each contract customer reserves the right to contest its respective allocation of costs.

E – Evaluation of Wastewater Flows

DWSD shall continue ongoing technical review of wastewater flows in the DWSD system to establish and maintain wastewater contribution data that will support the proportional allocation of costs as set forth in D(1). The parties agree that the wastewater flow elements of ratemaking terms under prior agreements, including the allocation of infiltration and inflow and the application of a uniform overflow credit are accommodated in the sewer rate methodology set forth in **Attachment 1**. The scope of the ongoing review is intended to encompass the types of evaluations traditionally conducted utilizing the Greater Detroit Regional Sewer System ("GDRSS") model and related tools. The scope of ongoing review will be established from time to time by the Board, after consultation with the Steering Committee and related forums.

F – Industrial Waste Charges

~~(24)~~ Each wholesale customer agrees that it shall adopt and enforce, and shall cause each of the local governmental units within its jurisdiction for sewage treatment and disposal service as provided by DWSD to adopt and enforce, rules and regulations pertaining to the use, design and construction of sewers, and the discharge of industrial or commercial wastes into sewers, where such sewers are tributary to DWSD's treatment works. Such rules and regulations shall be consistent with and at least as stringent as all applicable provisions of the pertinent ordinances adopted by the City of Detroit, these being the 1979 amendments to Chapter 56, Article I, and Chapter 56, Article III, of the Municipal Code of the City of Detroit as they may be adopted and amended from time to time. In the event any municipality or other governmental unit fails to adopt a required ordinance, or fails to diligently enforce the same, DWSD shall take appropriate action which may include suit in an appropriate court of general jurisdiction alleging such municipality's failure to adopt or enforce an ordinance. Should the court find, following a hearing on the merits, that the allegations in DWSD's petition are true, the parties agree that such court may, in such instance, grant appropriate injunctive relief against said municipality or any individual discharger located there, terminate the municipality's contractual right to discharge waste waters into DWSD's system and/or to grant DWSD such other relief as may be appropriate under the circumstances. These actions shall enable DWSD to:

i. Deny or condition new or increased contributions of pollutants or changes in the nature of pollutants, to the waste collection system by Industrial and Commercial Users. The terms "Industrial and Commercial" user shall mean those users defined in Section 56-6-3(H) and (P) of Detroit Ordinance No. 353-H of Chapter 56 of Article 6 passed on November 7, 1979 and as may be amended from time to time.

ii. Require compliance with applicable current future National Pretreatment Standards and other more restrictive requirements as may be imposed by DWSD promulgated by the U.S. EPA under the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq.

iii. Control, through permit, contract order, or similar means, the contribution to the waste collection system by Industrial and Commercial Users to ensure compliance with subsection (b) above.

iv. Require the development of compliance schedules by Industrial and Commercial Users for the installation and facilities required to meet applicable National Pretreatment Standards and other more restrictive requirements as may be imposed by DWSD.

v. Require the submission of notices and self-monitoring reports from Industrial and Commercial Users to assess and assure compliance with National Pretreatment Standards and other more restrictive requirements as may be imposed by DWSD.

vi. Carry out all inspection, surveillance and monitoring procedures necessary to determine, independent of information supplied by Industrial and Commercial Users, compliance or

noncompliance with applicable National Pretreatment Standards and other more restrictive requirements as may be imposed by DWSD. The parties recognize that DWSD may contract with qualified parties to carry out the inspection, surveillance and monitoring procedures of this paragraph.

vii. Seek injunctive relief for noncompliance with National Pretreatment Standards and other more restrictive requirements as may be imposed by DWSD.

viii. Require Industrial and Commercial Users to install containment facilities to protect the treatment works from accidental spills of critical or hazardous materials~~. *Order re Service Contract Amendments, Model Contract, §3.*~~

7. ~~(14)~~ Contract Amendment for Industrial Waste Control.

a. All wholesale customers and all municipalities under contract to such wholesale customers shall enter into amendments of the service contracts between or among them and DWSD to embody or incorporate the provisions that assure uniformity throughout the DWSD wastewater treatment system as required by applicable federal statutes and regulations.

b. DWSD's wastewater contracts shall be amended to include:

i. A process of diligent and uniform enforcement and implementation of the ordinances, rules and regulations to be adopted pursuant to Section IV(9) of the 1980 Settlement Agreement.

ii. A process to pass through to industrial customers amounts billed with respect to such customers for sewage surcharges and industrial cost recovery charges.

iii. Such provisions as are required to establish delegated or cooperative authority or procedures for inspection, monitoring, measurement, surveillance, enforcement and dispute resolution, with respect to prohibited discharges, sewage surcharges and industrial cost recovery charges. ~~*1980 Rate Settlement Agreement §IV(9)(c) & Exhibit E.*~~

TO: Board of Water Commissioners

FROM: Rate Simplification Work Group

DATE: November 22, 2013

SUBJECT: Rate Simplification Recommendations

EXECUTIVE SUMMARY

1. The Why and What of Rate Simplification

The Rate Simplification Work Group ("Group") was charged with recommending a simplified approach to estimate each customer's relative share of the sewer system's common-to-all revenue requirements while maintaining the present level of fairness and accuracy of the share estimates, improving transparency and revenue predictability, but requiring less time and effort.

Accordingly, the Group recommends three proposals to simplify the rate-setting process. The proposals will be implemented in the FY 2014-15 rates.

Before the end of the FY 2016-17 rate year, the Sewer Steering Committee will evaluate the implementation of the proposals and recommend adjustments as may be deemed necessary.

DWSD will continue to monitor the flow and cost data used in allocating common-to-all revenue requirements to insure that the data and the processes/equipment used to generate the data are valid and accurate and to correct material errors when detected. These efforts are necessary and will continue whether or not the simplification proposals are implemented.

2. Simplified Allocation of Common-To-All Costs

For more than a decade, each Tier 1 customer's share of the common-to-all revenue requirement has been remarkably stable, notwithstanding that there have been significant changes in demographics and economic conditions. Furthermore there appears to be a consensus among customers that the overall allocation of the revenue requirement has been fair.

It is proposed that the allocation of common-to-all revenue requirements be simplified as follows:

- Each Tier 1 customer's "Share" expressed as a percentage of the DWSD common-to-all revenue requirements for an agreed-upon future multi-year "Rate Period" will be based on its average share of system revenue requirements for an agreed-upon prior period. The first Rate Period will be three years beginning FY 2014-15. The Work Group is still evaluating the period to be used to establish shares for the first Rate Period.

- Differences between the projected revenue requirement for a rate year and the actual revenue requirement for that year may be made up by adjusting revenue

requirements in a subsequent rate year as decided by the Board. However, differences between the amounts of bad debt estimated in the budget and actual bad debt will be incorporated into the revenue requirement for a subsequent rate year to insure that revenue shortfalls due to nonpayment of sewer charges are recovered.

- The rate protocols used to calculate Shares will not be changed during a Rate Period.
- Each customer's share of the system revenue requirement will be billed in monthly installments.
- Shares may be adjusted during a Rate Period if a customer can demonstrate a material change in shares has occurred.
- The current "Look Back" process will not be continued after FY 2013-14.

3. Simplified Flow Balancing

Over half of the flow reaching the Wastewater Treatment Plant is not measured through customer wastewater billing meters and, therefore, is not directly attributable to any specific customer based on wastewater meter data. DWSD and its customers developed procedures to estimate these flows and to remove from the rate allocation process some flows that do not reach the wastewater treatment plant.

The Group recommends a simplified approach to allocate flows between customers with billing meters and the unmetered customers Detroit plus Highland Park and Hamtramck and other small unmetered customers. The simplified flow balance process is designed to accomplish the same flow allocation as the more complex procedures presently used.

4. Simplified Estimates of Cost Pools

DWSD's costs are accumulated into several cost pools reflecting costs for certain types of wastewater services because use of these services varies by customer class (Detroit retail specific, suburban wholesale specific, industrial specific, CSO-related, sanitary and stormwater).

The Group recommends that for the first Rate Period, operating costs in the cost pools will be approximated as the best estimate of costs for the Rate Period. Capital costs will continue to be allocated to cost pools based on DWSD's fixed asset database. At the end of the first Rate Period, the quality of DWSD cost accounting will be evaluated with the objective of revisiting the best method to allocate costs to the cost pools for rate setting purposes.

DETAILED DESCRIPTION OF RECOMMENDATIONS

1. The Why and What of Rate Simplification

The Rate Simplification Work Group was charged with recommending a simplified approach to estimate each customer's relative share of the sewer system's common-to-all revenue requirements while maintaining the present level of fairness and accuracy of the share estimates, improving transparency and revenue predictability, but requiring less time and effort.

During the Group's work, it became clear that other aspects of the rate setting process could be simplified. A proposal to simplify the presently complex process of allocating unmetered flows in the system among customers has been developed. Likewise the Work Group proposes that the process of grouping of costs into the costs pools that are allocated among different customer classes should be simplified.

Accordingly, the Group recommends three significant proposals to simplify the rate-setting process.

The recommendations will be implemented in the FY 2014-15 rates. They will remain in place through the FY FY2016-17 rate year. Before the end of the FY 2016-17 rate year, the Sewer Steering Committee will evaluate the implementation of the following recommendations and recommend adjustments as may be deemed necessary.

The Group recommends continuing activities to monitor the flow and cost data used in allocating common-to-all revenue requirements to insure that the data and the processes/equipment used to generate the data are valid and accurate and to correct material errors when detected. These efforts are necessary and will continue whether or not the simplification proposals set forth below are implemented.

2. Summary of the Recommended Approach for Rate Simplification

Each customer's charge for common-to-all sewer services is a function of two components: the sewer system's total revenue requirement and each customer's relative share ("Share") of that revenue requirement based on its relative volume and flow characteristics. Because much of the flow in the system does not pass through billing meters, a complicated methodology to allocate "unmetered" flow has been developed and is currently employed. Further, because the costs to treat wastewater flow depend on flow characteristics, other protocols are used to develop costs pools for various types of transport and treatment costs. The recommendations below seek to simplify each of these processes.

(a) Historical Stability of Customers' Relative Shares of Revenue Requirements

The key to the rate simplification recommendations is that for more than a decade, each Tier 1 or wholesale customer's share of the total sewer revenue requirement has been remarkably stable, notwithstanding that there have been significant changes in demographics and economic conditions and revisions to the rate-setting protocols.

Figure 1 shows each Tier 1 customer's share of "allocation volume" for the period 2008 to 2012 and the average over that period. Allocation volume is the principal measure on which

"common-to-all" costs (those costs all customers share) are allocated. This measure is coupled with the characteristics of sanitary and non-sanitary flow and the pollutant strength of each to determine each customer's final share of common-to-all costs.

Figure 2 shows each Tier 1 customer's share of common-to-all revenue requirements over the same period using the FY 2011-12 rate protocols.

In both figures, it can be seen that annual deviations from the long term average are minor with very limited exception.

There is a consensus among customers that the overall allocation of the revenue requirement has been fair. Furthermore, when a customer has identified data that is in error, questioned the proper attribution or accounting for costs, or challenged an aspect for the rate protocols, DWSD and the customers have worked successfully to reach a consensus on a resolution.

The take-away has been that the allocation of revenue requirements could be greatly simplified by allocating revenue requirement based on "historical" shares so long as there are processes to:

- Adjust historical shares to reflect any material changes in use of the wastewater system over time, and
- Address any errors in flow data, correct any inaccuracies in aggregation or allocation of costs to customer classes, and review any rate protocol that appears to stray from the underlying principle that customers should bear a proportional share of system costs based on their use.

The Group believes that the recommendations below are an appropriate way to allocate costs consistent with historical practices while incorporating those protections.

(b) Simplified Calculation of Common-to-All Shares

At present, the calculation of each customer's common-to-all revenue requirement is performed before each rate year begins, using detailed budget and flow projections. After the close of the rate year, a Look Back is performed in which the detailed calculations are repeated to true up customers' charges based on audited financials and actual flow. The calculations rely on complex technical analyses, approximations and assumptions to produce "best estimates" of volume and flow characteristics for each customer. Analyses of these rate protocols have demonstrated that although they demand substantial time and effort in their calculation, they result in only approximate estimates of each customer's use of or demand on the DWSD's system. Further, when considered as a proportionate share of the total system revenue requirement, each customer's estimated relative share of the common-to-all revenue requirement has been fairly constant over the past 10 years, notwithstanding demographic changes and changes in the rate protocols.

To simplify the calculation of Shares, the Group recommends:

- Each wholesale customer's percentage "Share" of the DWSD sewer system's common-to-all revenue requirement for an agreed-upon future multi-year "Rate Period" will be based on its average share of system revenue requirements for an agreed-upon prior period.

- The first Rate Period will be three years from FY 2014-15 through FY 2016-17.

- Shares for the first Rate Period were developed as described in Exhibit 1, The Foster Group, Memorandum, "Initial Rate Period SHARES" (November 22, 2013).

- Although the length of the second Rate Period will be determined later during evaluation of the first Rate Period, the initial expectation of most group members is to establish subsequent Rate Periods of five-years duration.

- Each year during a Rate Period, DWSD will establish annual budgets and annual common-to-all revenue requirements for all customers. Thus, although a customer's Share will remain the same during a Rate Period, its annual common-to-all revenue requirement during the Rate Period will go up or down as DWSD's annual common-to-all budget goes up or down.

- Differences between the projected revenue requirement for a rate year and the actual revenue requirement for that year may be made up by adjusting revenue requirements in one or more subsequent rate years. This will be an annual Board policy decision based on the Board's current financial plan.

    - However, differences between the amounts of bad debt estimated in the budget and actual bad debt will be incorporated into the revenue requirement for a subsequent rate year to insure that revenue shortfalls due to nonpayment of sewer charges are recovered.

- The rate protocols used to calculate Shares will not be changed during a Rate Period.

- Changes in Shares will be adjusted during the Rate Period only to the extent that the Steering Committee approves interim adjustments.

    - If, during a Rate Period, a customer demonstrates to the satisfaction of the Steering Committee that its flows will or have changed materially during that Rate Period, the Steering Committee will recommend to the Board adjustments to all customers' Shares during that Rate Period. Exhibit 2 is the process for reviewing and acting on requests for changes in shares.

        - In a similar fashion, if there is a reason to change the allocation of CSO/wet weather costs, DWSD and its customers will engage in a process to reallocate.

- During the Rate Period, meters will continue to be maintained, meter data will continue to be collected, and the data will be monitored at least annually for any apparent permanent trends in relative shares.

- Before the beginning of a Rate Period, customer Shares will be updated as necessary to take into consideration any changes in relative shares among customers during the immediately preceding Rate Period.

- Each customer's share of the system revenue requirement will be billed in monthly installments.

    - The default approach will be 12 equal installments, but winter and summer seasonal factors will be developed at customer request.

- The current "Look Back" process will not be continued after FY 2013-14.

Exhibit 1 sets forth the Base Shares for Detroit retail and all wholesale customers.

(c) Simplified Calculation of "Suburban Common-to-All Revenue Requirements

Costs for metering and customer outreach are allocated only to suburban wholesale customers based on relative flow. The relative flow percentages for each suburban wholesale customer are set forth in Exhibit 1. All other provisions of rate simplification for common-to-all revenue shall apply to these costs as well.

(d) Allocation of CSO Costs

There will be no change in the allocation of costs associated with DWSD's CSO program. The CSO allocation shares are set forth in Exhibit 1.

(e) Simplified Flow Balancing

Over half of the flow reaching the Wastewater Treatment Plant is not measured through customer wastewater billing meters and, therefore, is not directly attributable to any specific customer based on wastewater billing meter data. The flows originating within Detroit come from unmetered retail customers. The local sewer systems in Highland Park, Hamtramck, parts of Dearborn are interconnected with Detroit's system or are otherwise unmetered, preventing customer-specific metering of those flows. Finally downstream from customer billing meters there is infiltration and in-flow (I/I) into the shared trunk and interceptor sewers that is unmetered in terms of contributions from specific customers.

DWSD and its customers developed procedures to estimate these unmetered flows and to remove from the rate allocation process some flows that do not reach the wastewater treatment plant. The practical net effect of this allocation process is to attribute some unmetered flow to Detroit, Highland Park and Hamtramck and several small wholesale customers (collectively "Detroit+ Flow"), and to attribute the balance of the unmetered flow ("Common Flow"), to all customers pro rata.

To simplify the allocation of unmetered flows, the Group recommends:

- Common Flow (aka the "Z Factor") as an average percentage of total flow will be estimated based on a review of historical data. For the first Rate Period, the Z Factor will be calculated as the average Z Factor in effect during for FY 2007-08 through FY 2011-12.

- Common Flow will be excluded when computing Shares.

- Shares will be computed as fractions of the sum of billing meter flows plus Detroit+ Flow.

- Detroit+ Flow will be allocated among Detroit, Hamtramck, Highland Park and all other unmetered customers based on estimated retail water sales or some other basis as determined by DWSD.

(f) Simplified Estimates of Cost Pools

DWSD's costs are accumulated into several cost pools reflecting costs for certain types of wastewater services because use of these services varies by customer class (Detroit retail specific, suburban wholesale specific, industrial specific, CSO-related, sanitary and stormwater).

It has been challenging to accurately accumulate many of DWSD's non-capital costs into distinct cost pools.

As DWSD implements new finance and accounting systems, accurate cost accumulation should improve.

To simplify the development of cost pools, the Group recommends:

- For the first Rate Period, cost pools will be based on the best estimate of relative cost pools for FYFY 2015 to FY 2017 3-14. The common-to-all costs is comprised on a flow-based sub-pool for those common-to-all costs that vary with flow and a strength of flow-based cost pool for those common-to-all costs that vary with both flow and strength of flow. For the common-to-all cost pool, 47% of these costs will be attributed to the flow-based common-to-all cost sub-pool and 53% will be attributed to the strength of flow common-to-all cost sub-pool.

- CSO-related costs that will be allocated on the 83%/17% Detroit/suburban wholesale split shall be budgeted and tracked as accurately as possible

- At the end of the first Rate Period, the quality of DWSD cost accounting will be evaluated with the objective of revisiting the best method to allocate costs to the cost pools for rate setting purposes.

- Capital revenue requirements will continue to be assigned to cost pools based on DWSD's fixed asset records.

(g) Rate Simplification Pro Forma

Exhibit 3, The Foster Group, Memorandum, Rate Simplification Pro Forma (November 22, 2013) sets forth the hypothetical calculations of how the rate simplification recommendations would have been applied to the projected FY 2013-14 revenue requirements had the Base Shares set forth in Exhibit 1 been in effect.

3. Activities to Insure the Accuracy of Flow and Cost Data

(a) Flows

Presently the Flow Monitoring Task Force is charged with overseeing the accuracy of meters and data validation. This activity will continue as before. A stronger emphasis will be placed on determining whether any customer's underlying flow characteristics have changed (as distinguished from normal variations due to climatological conditions). The rate simplification approach will reduce the level of effort for activities related to cost allocation (*e.g.,* flow balance) and may permit a reduction in the amount or frequency of data validation activities.

Data verification will be performed annually.

While a detailed cost allocation procedure will not be performed annually, DWSD and the wholesale customers will develop flow-based measure(s) to compare how annual shares track against the historical average being used for the Rate Period. If a significant trend is found, communication to all customers for future rate planning will occur.

As the rate simplification process was nearing completion, the Detroit retail representatives requested a further evaluation of strength of non-sanitary flow. This topic will be given further study during the initial Rate Period with the results incorporated in the allocation for the next Rate Period as appropriate.

(b) Costs

The tracking of costs by cost center and customer class is an activity that has been challenging. DWSD has several initiatives underway to improve cost tracking and allocation for a variety of management purposes, not only rate setting. DWSD is committed to continue these efforts as part of its overall program to improvement financial planning and accounting. The proposal to simplify the allocation of cost pools should help streamline this effort.

There are a number of open issues related to the accounting for or classification of certain costs:

- Customer outreach costs,
- Customer connect interceptor costs, and
- Classification of capital assets to customer classes.

Resolution of these issues will not affect or be affected by the above rate simplification recommendations. Efforts to resolve these issues will continue as part of ongoing rate committee activities.

EXHIBIT 1
THE FOSTER GROUP
INITIAL RATE PERIOD SHARES
(November 22, 2013)

EXHIBIT 1

TFG

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MEMORANDUM

Initial Rate Period SHARES November 22, 2013

To: Sue McCormick, Nickie Bateson

From: Bart Foster

The intent of this memorandum is to provide final recommendations regarding the SHARES by which to allocate costs to customers and compute recommended FY 2014-15 sewer rates under the Rate Simplification Proposal. It is our understanding that all of the major county districts (and a few individual community customers) have reviewed and approved these SHARES, and that processes are in place for review with representatives other suburban customers. Under the terms of the Rate Simplification Proposal, these SHARES will be used to allocate "common-to-all" costs to customers, and (absent changes for extraordinary events[1]) will remain constant for the initial Rate Period, which includes FY 2015-16 and FY 2016-17.

The Look-Back Committee has deliberated on this topic for close to a year, and there are numerous documents that have been produced regarding this matter. All of these documents are published on the DWSD portal, many of which are incorporated by reference into this recommendation.

Background and General Philosophy

The DWSD Sewer Rate Methodology has always allocated revenue requirements to customers based on a cost of service principles. The traditional methodology is designed to proportionally allocate cost responsibility, based fundamentally on the wastewater volumes (flows) contributed by each customer. Over the years the basic methodology was modified to also reflect the type of flow that was contributed (dry weather vs. wet weather, sanitary vs. infiltration, etc.) and the relative pollutant loadings of each type of flow. These elements were introduced to reflect the varying treatment costs associated with different types of wastewater contributions. In recent years the technical efforts to analyze and determine flows have grown increasingly complex, yet the overall relative cost responsibility for each customer did not materially change from year to year.

[1] The Rate Simplification Proposal lays out a specific process by which customers can seek modifications to SHARES within a Rate Period, which requires demonstration of a material change to the Steering Committee.

The core philosophy toward implementing the Rate Simplification Proposal centers around its first initiative: "*Simplified Calculation of SHARES*". This premise focuses on establishing simplified SHARES by which to assign the portion of the DWSD revenue requirement that is to be allocated as "common to all" customers. Initial efforts towards determining such SHARES focused on reviewing each customer's relative share actually experienced in recent years, and using a historical average of these individual annual amounts to use for future rate calculations. The individual SHARES would be locked in for a designated, multi-year Rate Period.

As the Committee's deliberations progressed, it became apparent that the quality of recent data did not adequately support a direct application of unadjusted "historical average" share calculations. The Committee concluded that the increased complexity of flow balancing efforts was not providing the level of precision and confidence that it was intended to produce on the relative flows by source, and therefore customers. In part, the old approach relied on imprecise definitions of "dry days" and "wet days" to attempt to assign flow types, which led to confusing conclusions. More pertinently, it became apparent that the existing flow balance protocols for allocating contributed flow volumes to sanitary and non-sanitary sources dramatically overstated the sanitary portion, and understated the non-sanitary portion. As these relative flow types have a material impact on cost allocation, the Committee concluded that historical data produced from the existing flow balance efforts did not produce reliable historical averages to use for future rates. This realization launched the emergence of the second Rate Simplification initiative: "*Simplified Flow Balancing*".

The premise of simplified flow balancing involves estimating the level of total flow contributed to the wastewater treatment plant that is reasonably considered "common", and therefore the responsibility of all customers, and remove it from the flow balance equation[2]. This common flow was defined as "Z" and it is estimated by establishing a "Z Factor" reflecting the relative percentage of total WWTP flow that is to be considered "common".

The simplified approach eliminates:

- The need to separate dry weather and wet weather flows; and therefore the need to apply individual overflow credits to individual customer's wet weather flow amounts;
- The prior approach's attempts to assign extraneous "common" DWII flows to individual customers.

Rather, the new simplified flow balance approach consists of:

- Starting with overall reported WWTP flow (**W**);
- Subtracting the "Common" flow (**Z**) based on the agreed to Z Factor;

[2] Basically, Z is removed from the allocation "pie" and is discarded for purposes of computing SHAREs. Since all customers would basically be allocated a proportional allocation of "Z" there is no need to include this element in SHARE calculations, as relative SHAREs would not change.

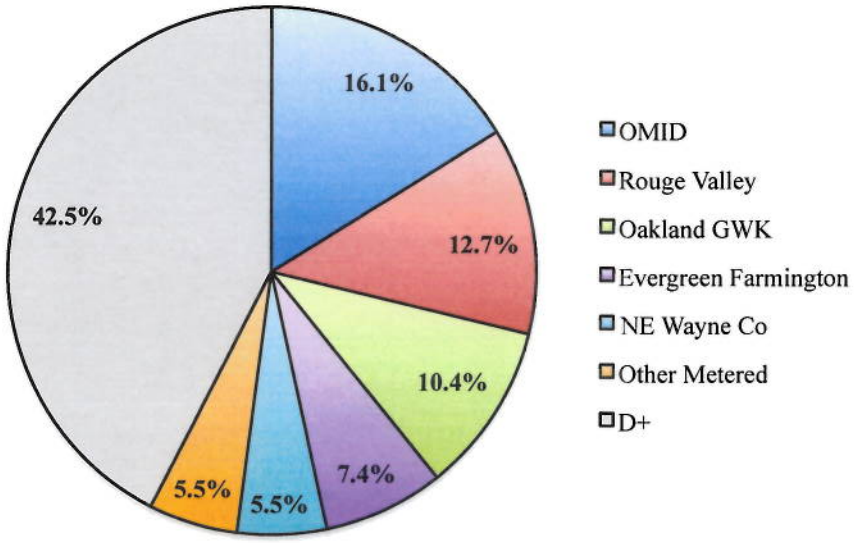
- Subtracting the metered flow (**M**) from the metered customer communities. *The metered flow for these communities now becomes their total allocation volume, and does not need to be adjusted in any manner.*
- The remaining flow is allocated to the unmetered communities (primarily Detroit), who are collective referred to as **D+** for purposes of the Rate Simplification Proposal.

The final aspect of the new approach is to assign individual community flows to sanitary and non-sanitary portions, so that relative pollutant loadings can be computed to reflect the strength of flow concept in the cost allocation methodology. The Committee, through the Flow Balance Task Force, collected and reviewed substantial amounts of data to achieve a better understanding of the relative sanitary flows within each community. The protocol that emerged was to estimate each community's sanitary flows based on reported water sales during a "winter quarter" – so as to eliminate high season water use from the equation.

The simplified flow balance approach was utilized to produce alternative historical data points and individual annual shares. Several approaches for applying these two initiatives to recent data were developed and reviewed by the Committee. The recommendation that has emerged for determining initial Rate Period SHARES is summarized below, described herein, and illustrated in the exhibits accompanying this memorandum.

Major Customer SHARES

So as to avoid anomalies associated with smaller customers, the Committee initially focused on "major" customer classifications in evaluating SHARES. The SHARES that emerged are summarized below.



These SHARES were determined utilizing the a three step approach:

Step 1 – Determine a reasonable estimate for historical "Z" factor using the old flow balance protocol, but recognizing new understandings regarding "best available data". (*see pages 2 through 4*)

Step 2 – Apply the historical "Z" factor to the historical data set, using the new Simplified Flow Balancing protocol to determine effective annual Shares for each major customer for each year from FY 2007-08 through FY 2011-12[3]. (*see pages 5 through 7*).

Step 3 – Establish the initial Rate Period SHAREs as the average of the annual shares for the five-year period. (*see page 8*)

Specifics regarding the calculations conducted for each of these steps are noted below.

Step 1 – Determine Historical Z

- Start by accumulating the flow data that was used in the LBA calculations for each year in the study period.
- Adjust these data points to reflect "best available data", including:
  - Remove the effects of "Rate Model Averaging" from the data. *Certain of the original data points were 5-year averages of DWII and wet weather volumes. The Committee believed that eliminating this approach from the data set would produce a better depiction of annual data points.*
  - Revise the originally reported WWTP flow downward by 12 mgd to reflect revised estimates of recycle flow.
  - Estimate the impact of the prior bullet on the original flow balance, and reflect accordingly. *This effectively changes the DWII allocated to the D+ class.*
  - Rebalance the sanitary / non-sanitary allocations of each communities resulting flow based on the findings of the FBTF.
  - Apply the newest estimated overflow credit of 15% to all years in the period. (*Original data points were 30.8% through FY 2010-11)*
- Re-compute "allocation volumes" for **M** and **D+** using these revised data points.
- Subtract **M** and **D+** from **W** to result in **Z**.
- Compute effective annual **Z** Factors and a weighted average **Z** factor for the 5-year period, which equals 14.87%.

[3] This period was selected because it aligned with the "5-Year LBA" period that the LBA Committee was originally formulated to address. While the Committee also review data for prior periods and preliminary data for FY 2012-13, those periods were not included in the historical averages as the prior periods had not received as much scrutiny and the data for FY 2012-13 is unaudited and/or incomplete.

Step 2 – Compute Annual Shares Under Simplified Protocol

- Rebuild allocation volumes using the new protocol
  - For **M** class, simply equals metered volume, unadjusted
  - Apply average **Z** Factor of 14.87% to reported (and adjusted) **W** (WWTP volume) for each year.
  - **D+** then equals **W – M – Z**
- Allocate total allocation volumes into sanitary and non-sanitary portions based on the findings of the FBTF
- Allocate relative pollutant loadings to each customer, maintaining the assumption that non-sanitary flows are 1/3rd the relative strength of sanitary flows
- Compute individual customer volume and pollutant shares
- Apply relative flow/pollutant CTA revenue requirement split to arrive at annual shares for each customer.

Step 3 – Establish Initial Rate Period SHAREs

- Simply compute an average of the five individual annual shares.

Small Customer SHARES

Once the Committee achieved consensus on the SHAREs for large, major customers, analyses were conducted to assess the applicability of this approach for smaller customers. In effect there are two separate sets of "small" customers – those with metered wastewater that make up the "other metered" major class discussed above, and those that do not have metered connections that are included in the D+ class above. It was acknowledged that relatively minor change in absolute shares could have an absolute dollar impact that would not be material to a large customer, but that could significantly impact smaller customers. Also, there was some concern that the underlying data (such as the estimates of sanitary volumes) may not have been as thoroughly vetted as that for the larger customers.

Several alternative approaches for small customer SHAREs were explored, discussed, and analyzed. The Committee concluded that the most prudent approach was to:

- Treat the "small" metered communities in the same manner as the major metered class. (*see pages 9 and 10*)
  - *Uniformity in approach was a priority amongst the Committee.*
- Treat all of the D+ communities as a singular class, and establish SHAREs that change uniformly from existing shares.
  - *Recognizes that much of the data for the small D+ customers is difficult to differentiate from Detroit – thus the original grouping.*

As we reviewed the resulting small customer SHAREs, it became evident that two modifications to this general approach were appropriate:

- The two metered Dearborn districts were consolidated into a single SHARE.
    - *Reflects the difficulty in aligning water use (used to assign sanitary flows) within the Dearborn service area.*
    - *Reflects Dearborn's signaled desire to consolidate several of their districts anyway.*
- Grosse Pointe Farms was removed from the D+ class and effectively treated as an anomaly in the M class.
    - Grosse Pointe Farms was unmetered for a large portion of the historical data period, but became metered during FY 2011-12.
    - The initial Grosse Pointe Farms SHARE is still being reviewed.

The Committee recognizes that many of the "small" customers have not been actively involved in the deliberative process and has established a process by which to invite their review and input prior to finalizing initial Rate Period SHAREs.

Summary

Recommended Initial Rate Period SHAREs for all customers are set forth on Page 1 of the attached exhibits. We are prepared to present this recommendation to all parties. In the meantime, we are proceeding with development of the FY 2014-15 sewer rates utilizing these SHAREs and the accompanying aspects of the Rate Simplification Proposal.

We are available to discuss this matter at your convenience.

Sewer Rate Simplification - Summary of Recommended SHARES

	(1) Status Quo *FY 2014 Rates*	(2) Recommend *Simplified Avg*	(3) Relative Chg *(2) - (1)*	(4) Relative % Chg *(3) / (1)*
Major County Systems				
OMID	*16.300%*	*16.140%*	*-0.160%*	*-1.0%*
Rouge Valley	*13.320%*	*12.660%*	*-0.660%*	*-5.0%*
Oakland GWK	*10.610%*	*10.400%*	*-0.210%*	*-2.0%*
Evergreen Farmington	*7.950%*	*7.370%*	*-0.580%*	*-7.3%*
NE Wayne Co	*5.550%*	*5.490%*	*-0.060%*	*-1.1%*
Subtotal	*53.730%*	*52.060%*	*-1.670%*	*-3.1%*
Other Metered Customers				
Allen Park	*0.146%*	*0.154%*	*0.008%*	*5.5%*
Center Line	*0.229%*	*0.211%*	*-0.018%*	*-7.9%*
Dearborn East & West	*3.763%*	*4.145%*	*0.382%*	*10.2%*
Farmington	*0.252%*	*0.253%*	*0.001%*	*0.4%*
Grosse Pointe Park	*0.346%*	*0.373%*	*0.027%*	*7.8%*
Melvindale	*0.332%*	*0.315%*	*-0.017%*	*-5.1%*
M° Subtotal	*5.068%*	*5.451%*	*0.383%*	*7.6%*
Grosse Pointe Farms	*0.677%*	*0.710%*	*0.033%*	*4.9%*
M° Total	*5.745%*	*6.161%*	*0.416%*	*7.2%*
M Total	*59.475%*	*58.221%*	*-1.254%*	*-2.1%*
D+ Customers				
Dearborn E. (Storm Only)	*0.061%*	*0.063%*	*0.002%*	*3.3%*
Dearborn N.E.	*0.310%*	*0.320%*	*0.010%*	*3.2%*
Grosse Pointe	*0.186%*	*0.192%*	*0.006%*	*3.2%*
Hamtramck	*0.778%*	*0.802%*	*0.024%*	*3.1%*
Harper Woods	*0.052%*	*0.054%*	*0.002%*	*3.8%*
Highland Park	*1.096%*	*1.130%*	*0.034%*	*3.1%*
Small Districts	*0.053%*	*0.055%*	*0.002%*	*3.8%*
Detroit	*37.989%*	*39.163%*	*1.174%*	*3.1%*
D+ Subtotal	*40.525%*	*41.779%*	*1.254%*	*3.1%*
TOTAL SHARES	*100.000%*	*100.000%*	*0.000%*	*0.0%*

Sewer Rate Simplification - Summary of Recommended SHARES

Including Supporting Cost Pool Shares

	(1)	(2)	(3)	(4)
		Share Details		Suburban
	SHARE	*Flow*	*Pollutants*	Wholesale Only
	~ (2) & (3)			*~ (2)*
Metered Customers				
OMID	16.14%	14.28%	17.42%	24.84%
Rouge Valley	12.66%	11.90%	13.18%	20.70%
Oakland GWK	10.40%	10.17%	10.55%	17.69%
Evergreen Farmington	7.37%	6.86%	7.73%	11.93%
NE Wayne Co	5.49%	5.43%	5.52%	9.44%
Allen Park	0.15%	0.14%	0.16%	0.24%
Center Line	0.21%	0.19%	0.23%	0.33%
Dearborn East & West	4.15%	3.86%	4.34%	6.72%
Farmington	0.25%	0.24%	0.26%	0.41%
Grosse Pointe Park	0.37%	0.36%	0.38%	0.62%
Melvindale	0.32%	0.29%	0.33%	0.51%
Grosse Pointe Farms	0.71%	0.68%	0.72%	1.18%
M Total	58.22%	54.40%	60.83%	94.61%
Detroit + Unmetered				
Dearborn E. (Storm Only)	0.06%	0.09%	0.05%	0.15%
Dearborn N.E.	0.32%	0.47%	0.43%	0.81%
Grosse Pointe	0.19%	0.23%	0.20%	0.39%
Hamtramck	0.80%	1.03%	0.84%	1.79%
Harper Woods	0.05%	0.06%	0.06%	0.11%
Highland Park	1.13%	1.18%	1.06%	2.05%
Small Districts	0.06%	0.05%	0.05%	0.08%
Detroit	39.16%	42.51%	36.49%	
D+ Total	41.78%	45.60%	39.17%	5.39%
Total	100.00%	100.00%	100.00%	100.00%
Suburbs in D+	*2.62%*	*3.10%*	*2.68%*	*5.39%*
Detroit	*39.16%*	*42.51%*	*36.49%*	*0.00%*

Sewer Rate Simplification - Sample Share Calculations

Historical Data Points Modified for Original WWTP Vols, New Recycle Flow Estimates

Flow Balance Task Force Recommendations and Related "Best Available" Data

	Historical Data				
	2008	2009	2010	2011	2012
	Mcf	*Mcf*	*Mcf*	*Mcf*	*Mcf*
Metered Flow					
OMID	4,103,454	4,491,406	3,907,695	3,799,596	3,727,240
Rouge Valley	3,382,764	3,671,128	3,041,654	3,363,061	3,269,196
Oakland GWK	2,883,453	3,188,621	2,404,934	2,958,988	2,891,656
Evergreen Farmington	2,042,275	2,154,256	1,725,742	1,872,225	1,851,461
NE Wayne Co	1,422,601	1,698,509	1,296,673	1,611,703	1,618,773
Other Metered	1,471,581	1,554,845	1,275,774	1,404,618	1,430,021
M Total	15,306,127	16,758,765	13,652,472	15,010,191	14,788,347
Balance = **(D+ + Z)**	17,341,335	18,107,794	15,947,075	18,880,501	19,364,359
Total WWTP Flow	32,647,463	34,866,560	29,599,546	33,890,692	34,152,706
M% of Total	*46.9%*	*48.1%*	*46.1%*	*44.3%*	*43.3%*
Allocation Volume					
Sanitary Volume					
OMID	2,225,973	2,225,973	2,225,973	2,225,973	2,225,973
Rouge Valley	1,528,344	1,528,344	1,528,344	1,528,344	1,528,344
Oakland GWK	1,132,238	1,132,238	1,132,238	1,132,238	1,132,238
Evergreen Farmington	911,944	911,944	911,944	911,944	911,944
NE Wayne Co	577,355	577,355	577,355	577,355	577,355
Other Metered	672,431	672,431	672,431	672,431	672,431
M Total	7,048,284	7,048,284	7,048,284	7,048,284	7,048,284
D+	3,186,963	3,186,963	3,186,963	3,186,963	3,186,963
Subtotal Allo Volume	10,235,247	10,235,247	10,235,247	10,235,247	10,235,247
System "Z" Volume	0	0	0	0	0
Total	10,235,247	10,235,247	10,235,247	10,235,247	10,235,247
Local DWII					
OMID	*1,340,329*	*1,707,547*	*1,565,674*	1,211,546	1,139,190
Rouge Valley	*1,083,730*	*1,056,230*	*1,036,517*	1,044,697	950,832
Oakland GWK	*807,242*	*835,865*	*742,368*	687,017	619,685
Evergreen Farmington	*607,687*	*600,969*	*602,234*	647,286	626,522
NE Wayne Co	*414,867*	*414,573*	*378,019*	360,477	367,547
Other Metered	*359,806*	*345,644*	*325,348*	302,965	329,424
M Total	4,613,662	4,960,828	4,650,161	4,253,988	4,033,200
D+	*5,277,929*	*5,266,190*	*5,513,446*	5,329,958	5,696,933
Subtotal Allo Volume	9,891,591	10,227,018	10,163,607	9,583,945	9,730,133
System "Z" Volume	0	0	0	0	0
Total	9,891,591	10,227,018	10,163,607	9,583,945	9,730,133

Sewer Rate Simplification - Sample Share Calculations

Historical Data Points Modified for Original WWTP Vols, New Recycle Flow Estimates

Flow Balance Task Force Recommendations and Related "Best Available" Data

	Historical Data				
	2008	2009	2010	2011	2012
	Mcf	*Mcf*	*Mcf*	*Mcf*	*Mcf*
System DWII					
OMID	0	0	0	0	0
Rouge Valley	0	0	0	0	0
Oakland GWK	53,701	55,016	57,283	56,385	63,697
Evergreen Farmington	92,911	94,929	96,931	79,665	89,996
NE Wayne Co	21,388	21,680	20,856	6,357	7,181
Other Metered	9,499	9,729	10,112	9,808	11,079
M Total	177,499	181,354	185,182	152,215	171,953
D+	1,207,529	1,237,000	1,287,187	1,271,157	1,430,803
Subtotal Allo Volume	1,385,028	1,418,354	1,472,369	1,423,372	1,602,756
System "Z" Volume	4,549,636	5,460,328	2,578,994	6,007,989	5,968,573
Total	5,934,663	6,878,683	4,051,363	7,431,361	7,571,329
Wet Weather Flow					
OMID	*537,152*	*557,886*	*116,048*	*362,077*	*362,077*
Rouge Valley	*770,690*	*1,086,554*	*476,793*	*790,020*	*790,020*
Oakland GWK	*943,973*	*1,220,518*	*530,328*	*1,139,733*	*1,139,733*
Evergreen Farmington	*522,644*	*641,344*	*211,564*	*312,996*	*312,996*
NE Wayne Co	*430,379*	*706,582*	*341,299*	*673,872*	*673,872*
Other Metered	*439,344*	*536,770*	*277,995*	*429,222*	*428,165*
M Total	3,644,182	4,749,653	1,954,026	3,707,920	3,706,863
D+	4,104,008	4,104,008	4,104,008	4,104,008	4,076,662
Subtotal Allo Volume	7,748,190	8,853,661	6,058,034	7,811,928	7,783,526
System "Z" Volume	0	0	0	0	0
Total	7,748,190	8,853,661	6,058,034	7,811,928	7,783,526
Overflow Credit	15.0%	15.0%	15.0%	15.0%	15.0%
Net Wet Weather Flow					
OMID	456,579	474,203	98,640	307,766	307,766
Rouge Valley	655,087	923,571	405,274	671,517	671,517
Oakland GWK	802,377	1,037,441	450,779	968,773	968,773
Evergreen Farmington	444,247	545,142	179,830	266,046	266,046
NE Wayne Co	365,822	600,594	290,104	572,791	572,791
Other Metered	373,442	456,254	236,296	364,839	363,941
M Total	3,097,554	4,037,205	1,660,922	3,151,732	3,150,834
D+	3,488,407	3,488,407	3,488,407	3,488,407	3,465,163
Subtotal Allo Volume	6,585,961	7,525,612	5,149,329	6,640,139	6,615,997
System "Z" Volume	0	0	0	0	0
Total	6,585,961	7,525,612	5,149,329	6,640,139	6,615,997

Sewer Rate Simplification - Sample Share Calculations

Historical Data Points Modified for Original WWTP Vols, New Recycle Flow Estimates
Flow Balance Task Force Recommendations and Related "Best Available" Data

	Historical Data				
	2008	2009	2010	2011	2012
	Mcf	*Mcf*	*Mcf*	*Mcf*	*Mcf*
Subtotal Non-Sanitary					
OMID	1,796,908	2,181,750	1,664,315	1,519,312	1,446,955
Rouge Valley	1,738,817	1,979,801	1,441,791	1,716,214	1,622,349
Oakland GWK	1,663,320	1,928,321	1,250,429	1,712,175	1,652,155
Evergreen Farmington	1,144,845	1,241,040	878,995	992,997	982,564
NE Wayne Co	802,078	1,036,847	688,980	939,624	947,519
Other Metered	742,748	811,628	571,756	677,611	704,444
M Total	7,888,715	9,179,387	6,496,266	7,557,934	7,355,987
D+	9,973,865	9,991,597	10,289,039	10,089,522	10,592,899
Subtotal Allo Volume	17,862,580	19,170,985	16,785,305	17,647,456	17,948,886
System "Z" Volume	4,549,636	5,460,328	2,578,994	6,007,989	5,968,573
Total	22,412,216	24,631,313	19,364,299	23,655,445	23,917,459
Total Allocation Volume					
OMID	4,022,881	4,407,723	3,890,287	3,745,285	3,672,928
Rouge Valley	3,267,160	3,508,145	2,970,135	3,244,558	3,150,693
Oakland GWK	2,795,558	3,060,559	2,382,667	2,844,413	2,784,393
Evergreen Farmington	2,056,789	2,152,983	1,790,939	1,904,941	1,894,508
NE Wayne Co	1,379,432	1,614,202	1,266,334	1,516,979	1,524,873
Other Metered	1,415,179	1,484,059	1,244,187	1,350,042	1,376,875
M Total	14,936,999	16,227,671	13,544,550	14,606,218	14,404,271
D+	13,160,828	13,178,560	13,476,002	13,276,485	13,779,862
Subtotal Allo Volume	28,097,827	29,406,232	27,020,552	27,882,703	28,184,133
System "Z" Volume	4,549,636	5,460,328	2,578,994	6,007,989	5,968,573
Total	32,647,463	34,866,560	29,599,546	33,890,692	34,152,706
Effective "Z"	*13.9%*	*15.7%*	*8.7%*	*17.7%*	*17.5%*
Weighted 5-year average Effective "Z"					***14.87%***

Sewer Rate Simplification - Sample Share Calculations

Alternative LBA SHARE Calculations Modified for Simplified Approach

(Flows in Mcf, Loadings in lbs)

	Look-Back Data				
	2008	2009	2010	2011	2012
CTA Rev Req't	270,367,870	282,307,711	262,509,268	324,651,788	328,280,488
CTA Revenue Req't Split					
Volume	35.8%	42.1%	36.0%	42.6%	45.9%
Strength	64.2%	57.9%	64.0%	57.4%	54.1%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%
Metered Flow					
OMID	4,103,454	4,491,406	3,907,695	3,799,596	3,727,240
Rouge Valley	3,382,764	3,671,128	3,041,654	3,363,061	3,269,196
Oakland GWK	2,883,453	3,188,621	2,404,934	2,958,988	2,891,656
Evergreen Farmington	2,042,275	2,154,256	1,725,742	1,872,225	1,851,461
NE Wayne Co	1,422,601	1,698,509	1,296,673	1,611,703	1,618,773
Other Metered	1,471,581	1,554,845	1,275,774	1,404,618	1,430,021
M Total	15,306,127	16,758,765	13,652,472	15,010,191	14,788,347
Balance = **(D+ + Z)**	17,341,335	18,107,794	15,947,075	18,880,501	19,364,359
Total	32,647,463	34,866,560	29,599,546	33,890,692	34,152,706
M% of Total	*46.9%*	*48.1%*	*46.1%*	*44.3%*	*43.3%*
Allocation Volume					
Sanitary Volume					
OMID	2,225,973	2,225,973	2,225,973	2,225,973	2,225,973
Rouge Valley	1,528,344	1,528,344	1,528,344	1,528,344	1,528,344
Oakland GWK	1,132,238	1,132,238	1,132,238	1,132,238	1,132,238
Evergreen Farmington	911,944	911,944	911,944	911,944	911,944
NE Wayne Co	577,355	577,355	577,355	577,355	577,355
Other Metered	672,431	672,431	672,431	672,431	672,431
M Total	7,048,284	7,048,284	7,048,284	7,048,284	7,048,284
D+	3,186,963	3,186,963	3,186,963	3,186,963	3,186,963
Subtotal Allo Volume	10,235,247	10,235,247	10,235,247	10,235,247	10,235,247
System "Z" Volume	0	0	0	0	0
Total	10,235,247	10,235,247	10,235,247	10,235,247	10,235,247
Non-Sanitary					
OMID	*1,877,481*	*2,265,433*	*1,681,722*	*1,573,624*	*1,501,267*
Rouge Valley	*1,854,420*	*2,142,784*	*1,513,310*	*1,834,717*	*1,740,852*
Oakland GWK	*1,751,215*	*2,056,383*	*1,272,696*	*1,826,750*	*1,759,418*
Evergreen Farmington	*1,130,331*	*1,242,313*	*813,798*	*960,281*	*939,517*
NE Wayne Co	*845,246*	*1,121,154*	*719,318*	*1,034,348*	*1,041,418*
Other Metered	*799,150*	*882,414*	*603,343*	*732,187*	*757,590*
M Total	8,257,843	9,710,482	6,604,188	7,961,908	7,740,063
D+	9,298,389	9,734,779	8,357,475	10,652,636	11,097,522
Subtotal Allo Volume	17,556,232	19,445,261	14,961,663	18,614,543	18,837,585
System "Z" Volume	4,855,984	5,186,052	4,402,637	5,040,902	5,079,873
Total	22,412,216	24,631,313	19,364,299	23,655,445	23,917,459

Sewer Rate Simplification - Sample Share Calculations

Alternative LBA SHARE Calculations Modified for Simplified Approach

(Flows in Mcf, Loadings in lbs)

	Look-Back Data				
	2008	2009	2010	2011	2012
Total Allocation Volume					
OMID	4,103,454	4,491,406	3,907,695	3,799,596	3,727,240
Rouge Valley	3,382,764	3,671,128	3,041,654	3,363,061	3,269,196
Oakland GWK	2,883,453	3,188,621	2,404,934	2,958,988	2,891,656
Evergreen Farmington	2,042,275	2,154,256	1,725,742	1,872,225	1,851,461
NE Wayne Co	1,422,601	1,698,509	1,296,673	1,611,703	1,618,773
Other Metered	1,471,581	1,554,845	1,275,774	1,404,618	1,430,021
M Total	15,306,127	16,758,765	13,652,472	15,010,191	14,788,347
D+	12,485,352	12,921,742	11,544,438	13,839,599	14,284,485
Subtotal Allo Volume	27,791,479	29,680,508	25,196,910	28,849,790	29,072,832
System "Z" Volume	4,855,984	5,186,052	4,402,637	5,040,902	5,079,873
Total	32,647,463	34,866,560	29,599,546	33,890,692	34,152,706
Effective "Z"	*14.9%*	*14.9%*	*14.9%*	*14.9%*	*14.9%*
Volume Allocation Shares					
OMID	***14.8%***	***15.1%***	***15.5%***	***13.2%***	***12.8%***
Rouge Valley	***12.2%***	***12.4%***	***12.1%***	***11.7%***	***11.2%***
Oakland GWK	***10.4%***	***10.7%***	***9.5%***	***10.3%***	***9.9%***
Evergreen Farmington	***7.3%***	***7.3%***	***6.8%***	***6.5%***	***6.4%***
NE Wayne Co	***5.1%***	***5.7%***	***5.1%***	***5.6%***	***5.6%***
Other Metered	***5.3%***	***5.2%***	***5.1%***	***4.9%***	***4.9%***
M Total	***55.1%***	***56.5%***	***54.2%***	***52.0%***	***50.9%***
D+	***44.9%***	***43.5%***	***45.8%***	***48.0%***	***49.1%***
Total	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***
Loadings Allocation (BOD)					
Total Loadings	239,742,200	236,396,400	239,268,900	154,896,900	141,046,400
Total Strength - mg/l	118	109	130	73	66
Non-San / San Ratio	**33.3%**	**33.3%**	**33.3%**	**33.3%**	**33.3%**
Weighted Adj Influent Split					
Sanitary	10,235,247	10,235,247	10,235,247	10,235,247	10,235,247
Non-Sanitary	*7,469,992*	*8,209,617*	*6,454,121*	*7,884,360*	*7,971,689*
Total	*17,705,238*	*18,444,864*	*16,689,368*	*18,119,607*	*18,206,936*
Sanitary %	*58%*	*55%*	*61%*	*56%*	*56%*
Non-Sanitary %	*42%*	*45%*	*39%*	*44%*	*44%*
Sanitary Loadings	*138,592,915*	*131,178,825*	*146,738,707*	*87,496,823*	*79,290,922*
Non-Sanitary Loadings	*101,149,285*	*105,217,575*	*92,530,193*	*67,400,077*	*61,755,478*
Total Loadings	*239,742,200*	*236,396,400*	*239,268,900*	*154,896,900*	*141,046,400*
Sanitary Strength	217	205	230	137	124
Non-Sanitary Strength	72	68	77	46	41
Allocated Strength	126	116	139	78	71
Total Strength	118	109	130	73	66

Sewer Rate Simplification - Sample Share Calculations

Alternative LBA SHARE Calculations Modified for Simplified Approach

(Flows in Mcf, Loadings in lbs)

	Look-Back Data				
	2008	2009	2010	2011	2012
Total Loadings (BOD)					
OMID	38,614,660	38,206,167	39,948,820	23,512,539	21,120,586
Rouge Valley	29,064,164	28,741,168	29,142,452	18,292,722	16,334,774
Oakland GWK	23,234,815	23,295,444	22,313,889	14,883,878	13,314,139
Evergreen Farmington	17,449,733	16,994,604	16,962,823	10,531,896	9,490,548
NE Wayne Co	11,632,522	12,188,832	11,714,490	7,882,670	7,161,648
Other Metered	12,711,889	12,387,540	12,523,388	7,834,508	7,165,339
M Total	132,707,783	131,813,754	132,605,862	82,938,213	74,587,034
D+	85,118,723	82,429,388	85,625,519	57,595,940	53,343,006
Subtotal Allo Loadings	217,826,506	214,243,142	218,231,382	140,534,154	127,930,039
System "Z" Loadings	21,915,694	22,153,258	21,037,518	14,362,746	13,116,361
Total	239,742,200	236,396,400	239,268,900	154,896,900	141,046,400
Effective "Z"	*9.1%*	*9.4%*	*8.8%*	*9.3%*	*9.3%*
Pollutant Allocation Shares					
OMID	***17.7%***	***17.8%***	***18.3%***	***16.7%***	***16.5%***
Rouge Valley	***13.3%***	***13.4%***	***13.4%***	***13.0%***	***12.8%***
Oakland GWK	***10.7%***	***10.9%***	***10.2%***	***10.6%***	***10.4%***
Evergreen Farmington	***8.0%***	***7.9%***	***7.8%***	***7.5%***	***7.4%***
NE Wayne Co	***5.3%***	***5.7%***	***5.4%***	***5.6%***	***5.6%***
Other Metered	***5.8%***	***5.8%***	***5.7%***	***5.6%***	***5.6%***
M Total	***60.9%***	***61.5%***	***60.8%***	***59.0%***	***58.3%***
D+	***39.1%***	***38.5%***	***39.2%***	***41.0%***	***41.7%***
Total	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***
SHARES					
OMID	***16.7%***	***16.7%***	***17.3%***	***15.2%***	***14.8%***
Rouge Valley	***12.9%***	***13.0%***	***12.9%***	***12.4%***	***12.1%***
Oakland GWK	***10.6%***	***10.8%***	***10.0%***	***10.4%***	***10.2%***
Evergreen Farmington	***7.8%***	***7.6%***	***7.4%***	***7.1%***	***6.9%***
NE Wayne Co	***5.3%***	***5.7%***	***5.3%***	***5.6%***	***5.6%***
Other Metered	***5.6%***	***5.6%***	***5.5%***	***5.3%***	***5.3%***
M Total	***58.8%***	***59.4%***	***58.4%***	***56.0%***	***54.9%***
D+	***41.2%***	***40.6%***	***41.6%***	***44.0%***	***45.1%***
Total	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***

Sewer Rate Simplification - 5-Year Average Share Calculations

	Look-Back Data					5-Year
	2008	2009	2010	2011	2012	Average
OMID	*16.7%*	*16.7%*	*17.3%*	*15.2%*	*14.8%*	*16.1%*
Rouge Valley	*12.9%*	*13.0%*	*12.9%*	*12.4%*	*12.1%*	*12.7%*
Oakland GWK	*10.6%*	*10.8%*	*10.0%*	*10.4%*	*10.2%*	*10.4%*
Evergreen Farmington	*7.8%*	*7.6%*	*7.4%*	*7.1%*	*6.9%*	*7.4%*
NE Wayne Co	*5.3%*	*5.7%*	*5.3%*	*5.6%*	*5.6%*	*5.5%*
Other Metered	*5.6%*	*5.6%*	*5.5%*	*5.3%*	*5.3%*	*5.5%*
M Total	*58.8%*	*59.4%*	*58.4%*	*56.0%*	*54.9%*	*57.5%*
D+	*41.2%*	*40.6%*	*41.6%*	*44.0%*	*45.1%*	*42.5%*
Total	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*

Sewer Rate Simplification - Sample Share Calculations

Alternative LBA SHARE Calculations Modified for Simplified Approach

(Flows in Mcf, Loadings in lbs) ** ***Z = 14.87%***

	Look-Back Data					
	2008	2009	2010	2011	2012	2013
Unbundle Other METERED						
Metered Flow						
Allen Park	38,220	39,252	34,382	42,616	41,950	35,475
Center Line	57,160	60,825	36,128	57,072	55,629	50,702
Dearborn East	507,432	529,147	480,415	489,313	486,046	421,187
Dearborn West	607,632	652,945	513,399	567,568	590,981	510,176
Farmington	68,050	75,344	57,180	71,087	64,081	54,361
Grosse Pointe Park	112,129	108,704	83,776	91,841	104,248	90,065
Melvindale	80,958	88,628	70,494	85,121	87,086	75,107
M° Subtotal	1,471,581	1,554,845	1,275,774	1,404,618	1,430,021	1,237,073
Allocation Volume						
Sanitary Volume						
Allen Park	20,115	20,115	20,115	20,115	20,115	20,115
Center Line	28,407	28,407	28,407	28,407	28,407	28,407
Dearborn East	270,244	270,244	270,244	270,244	270,244	270,244
Dearborn West	241,179	241,179	241,179	241,179	241,179	241,179
Farmington	30,272	30,272	30,272	30,272	30,272	30,272
Grosse Pointe Park	43,334	43,334	43,334	43,334	43,334	43,334
Melvindale	38,881	38,881	38,881	38,881	38,881	38,881
M° Subtotal	672,431	672,431	672,431	672,431	672,431	672,431
Non-Sanitary Volume						
Allen Park	18,105	19,137	14,267	22,501	21,835	15,360
Center Line	28,753	32,418	7,721	28,665	27,222	22,295
Dearborn East	237,188	258,903	210,171	219,069	215,802	150,943
Dearborn West	366,453	411,766	272,220	326,389	349,802	268,997
Farmington	37,778	45,072	26,908	40,815	33,809	24,089
Grosse Pointe Park	68,795	65,370	40,442	48,507	60,914	46,731
Melvindale	42,077	49,747	31,613	46,240	48,205	36,226
M° Subtotal	799,150	882,414	603,343	732,187	757,590	564,642
Volume Allocation Factor						
Allen Park	***0.14%***	***0.13%***	***0.14%***	***0.15%***	***0.14%***	***0.14%***
Center Line	***0.21%***	***0.20%***	***0.14%***	***0.20%***	***0.19%***	***0.20%***
Dearborn East	***1.83%***	***1.78%***	***1.91%***	***1.70%***	***1.67%***	***1.68%***
Dearborn West	***2.19%***	***2.20%***	***2.04%***	***1.97%***	***2.03%***	***2.03%***
Farmington	***0.24%***	***0.25%***	***0.23%***	***0.25%***	***0.22%***	***0.22%***
Grosse Pointe Park	***0.40%***	***0.37%***	***0.33%***	***0.32%***	***0.36%***	***0.36%***
Melvindale	***0.29%***	***0.30%***	***0.28%***	***0.30%***	***0.30%***	***0.30%***
M° Subtotal	***5.30%***	***5.24%***	***5.06%***	***4.87%***	***4.92%***	***4.93%***

Sewer Rate Simplification - Sample Share Calculations

Alternative LBA SHARE Calculations Modified for Simplified Approach

(Flows in Mcf, Loadings in lbs) ** ***Z = 14.87%***

	Look-Back Data					
	2008	2009	2010	2011	2012	2013
Total Loadings (BOD)						
Allen Park	354,084	339,550	356,555	236,066	212,207	256,133
Center Line	514,417	502,554	444,153	324,512	290,352	363,757
Dearborn East	4,729,764	4,569,503	4,878,658	2,934,381	2,650,744	3,253,638
Dearborn West	4,919,591	4,849,979	4,758,457	2,991,696	2,771,573	3,358,004
Farmington	580,403	580,512	562,575	375,075	321,809	388,757
Grosse Pointe Park	897,256	834,626	814,510	508,652	492,984	597,936
Melvindale	716,375	710,816	708,479	464,125	425,671	517,197
M° Subtotal	12,711,889	12,387,540	12,523,388	7,834,508	7,165,339	8,735,421
Pollutant Allocation Shares						
Allen Park	*0.16%*	*0.16%*	*0.16%*	*0.17%*	*0.17%*	*0.17%*
Center Line	*0.24%*	*0.23%*	*0.20%*	*0.23%*	*0.23%*	*0.24%*
Dearborn East	*2.17%*	*2.13%*	*2.24%*	*2.09%*	*2.07%*	*2.11%*
Dearborn West	*2.26%*	*2.26%*	*2.18%*	*2.13%*	*2.17%*	*2.18%*
Farmington	*0.27%*	*0.27%*	*0.26%*	*0.27%*	*0.25%*	*0.25%*
Grosse Pointe Park	*0.41%*	*0.39%*	*0.37%*	*0.36%*	*0.39%*	*0.39%*
Melvindale	*0.33%*	*0.33%*	*0.32%*	*0.33%*	*0.33%*	*0.34%*
M° Subtotal	*5.84%*	*5.78%*	*5.74%*	*5.57%*	*5.60%*	*5.67%*
SHARES						
Allen Park	*0.15%*	*0.15%*	*0.15%*	*0.16%*	*0.16%*	*0.15%*
Center Line	*0.23%*	*0.22%*	*0.18%*	*0.22%*	*0.21%*	*0.22%*
Dearborn East	*2.05%*	*1.99%*	*2.12%*	*1.92%*	*1.89%*	*1.91%*
Dearborn West	*2.23%*	*2.24%*	*2.13%*	*2.06%*	*2.11%*	*2.11%*
Farmington	*0.26%*	*0.26%*	*0.25%*	*0.26%*	*0.24%*	*0.24%*
Grosse Pointe Park	*0.41%*	*0.38%*	*0.36%*	*0.34%*	*0.37%*	*0.37%*
Melvindale	*0.32%*	*0.32%*	*0.31%*	*0.32%*	*0.32%*	*0.32%*
M° Subtotal	*5.64%*	*5.55%*	*5.50%*	*5.27%*	*5.29%*	*5.33%*

EXHIBIT 2

PROCESS TO ADDRESS CUSTOMER'S REQUEST FOR INTERIM SHARE CHANGE.

A customer may request interim re-evaluation of its Share during a Rate Period when the following five conditions have been established:

1. The customer knows with reasonable certainty that its flows will change or have changed;

2. The change in flow can be predicted or measured with reasonable certainty;

3. There is a date when it is reasonably likely that the change of flow will or did occur;

4. The cause of the change in flow is not likely to be one that affects most other customers similarly; and

5. The change in flow is likely to cause a material change in the customer's Share.

A customer makes a request for re-evaluation of Shares by providing a written submission to the Sewer Steering Committee with documents and analyses that substantiate the five conditions have been met.

Whenever an increase in service area occurs, the customer whose service area is increased shall provide a submission to the Steering Committee that provides an estimate of the flow likely to be generated from the increased service area.

Within 30 days of receipt of either a written request and its supporting submission or a submission associated with a change in service area, the Steering Committee shall refer the submission to an appropriate subcommittee/work group for evaluation.

The subcommittee shall expeditiously review the submission. If there is disagreement with the data or analyses presented by the customer, the subcommittee will work with the customer as necessary to reach agreement upon data and analyses on which a final determination can be made.

In the case of a request, the customer requesting the re-evaluation has the burden of establishing that the five conditions for re-evaluation have been satisfied. In the case of a change in service area:

- ALTERNATIVE I: the subcommittee has the burden to establish that the change in service area will result in a material increase in the customer's Share.

- ALTERNATIVE II: the customer increasing its service area has the burden to establish that the change in service area will not result in a material increase in the customer's Share

Following the analyses of the material submitted, the subcommittee shall submit a recommendation to the Steering Committee either to make adjustments to all customers' Shares and the amounts of such adjustments, to deny the request, or to determine that the increase in service area dos not justify a change in Share.

Final Review and Approval

The Steering Committee shall review the subcommittee's recommendation and can request further evaluation by the subcommittee, reject the recommendation, or refer the recommendation on to the Board.

Following Steering Committee action on the subcommittee recommendation, it shall forward the recommendation to the Board for action. If the recommendation to the Board is opposed by the requesting customer or by the customer whose service area has increase, that customer may file a position paper supporting its view to the Board before the Board acts.

Timing of Adjustments

If the change in Share is the result of an increased service area or the result of a request for re-evaluation that was made before the expected change occurs, the revised Share shall be effective upon the occurrence of the change of flow. If the change will occur in the middle of a rate year, the subcommittee can recommend that the impact be prorated over the rate year if it determines that is appropriate. When the customer requests a re-evaluation after the conditions have already changed, any adjustments in Shares shall occur beginning in the rate year following receipt of the request for re-evaluation.

Challenges by Another Customer

If another customer (the "Challenger") concludes that a customer received a new source of flow but did not inform the Steering Committee and request a re-evaluation of Shares, the Challenger may initiate a request for re-evaluation of the customer's share by submitting information showing that the above five factors have been met.

EXHIBIT 3
THE FOSTER GROUP
RATE SIMPLIFICATION PRO FORMA
(November 22, 2013)

EXHIBIT 3

TFG

THE FOSTER GROUP

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MEMORANDUM

Rate Simplification Pro Forma November 22, 2013

To: Sue McCormick, Nickie Bateson

From: Bart Foster

The intent of this memorandum is to present a "pro forma" calculation of Sewage Disposal Fund cost allocations and rate structure under the principles and approaches established by the Rate Simplification Proposal. As we have noted in prior discussions on this matter, implementation of the Rate Simplification Proposal will effectively streamline the documentation of sewer rate calculations into five simple tables. The attached pro forma illustrates these calculations.

For purposes of this illustration, we've assumed a hypothetical revenue requirement and preliminary cost pool assignments. These elements will be finalized for FY 2014-15 as the Department's budget and financial plan gets developed over the next two months. The SHAREs included in this illustration reflect the final recommendations of the Look-Back Committee and we do not anticipate any changes.

Inputs to the simplified pro forma rate calculation illustrated in the attached exhibit are highlighted in yellow. All other figures are calculated based on the simple calculations described herein.

A. **Revenue Requirements**. Total operating expense and capital revenue requirements are developed from the Department's financial plan and become the baseline "revenue requirement from rates" for the calculations. Operating expense will emerge from the Department's budget request. Capital revenue requirements consist of debt service on bonded indebtedness, capital improvements financed by revenues, and amounts necessary to establish and maintain reserve funds.
    - *The figures in this version of the pro forma are hypothetical pending finalization of the FY 2014-15 financial plan. These figures will be updated each year in the Rate Period to reflect annual financial plans.*

B. **Revenue Requirement Allocation Factors**. This approach embraces and implements the "Simplified Estimates of Cost Pools" element of the Rate

Simplification Proposal. Allocation factors are developed based on historical averages and adjusted for estimable changes in cost structure to assign the revenue requirements developed in Part A to the costs pools necessary to allocate revenue requirements to customers.

- *The figures in this version of the pro forma are preliminary and may change subtly as the FY 2014-15 financial plan is finalized. The Look-Back Committee has developed SHARES (see Part D) that are indicative of an overall common-to-all ("CTA") revenue requirement split of approximately 47% based on volume and approximately 53% based on pollutants. The relative factors in columns 9 and 10 have been (and will be) designed to produce that relative split. (See Part C).*

C. **Revenue Requirement Cost Pool Allocation**. Simply applies the allocation factors in Part B to the revenue requirements in Part A to assign costs to cost pools.

- *Note that the relative CTA split in footnote b is 47% volume / 53% pollutants, as targeted by the allocation factors presented in Part B.*

D. **SHARES**. Represents initial Rate Period SHARES (in Column 1) established by the parties for CTA revenue requirements. The CSO facility Shares are consistent with the 1999 Rate Settlement Agreement. Columns 6 and 7 illustrate relative Flow and Pollutant Shares, which are used to compute overall SHARES.

- *The Suburban Wholesale Cost Pool Shares in Column 3 are determined based on the relative (of the suburban total) Flow Shares shown in Column 6. Costs in this cost pool are not related to the wastewater treatment plant and therefore not allocable based on relative pollutant loadings.*

E. **Allocation of Revenue Requirements / Design of Fixed Charges**. Simply applies the SHARES from Part D to allocate revenue requirements in each cost pool to each customer. Totals individual cost pool allocations to determine total revenue requirement for each customer and calculates a fixed monthly charge for each customer.

- *Note that the rate structure for the Detroit retail class will continue to consist of both fixed and commodity charges.*

We trust that this information provides an effective, executive summary description and illustration of the Rate Simplification Proposal and we are prepared to present this information to policy makers and stakeholders.

DWSD Sewer Rate Model Template - Pro Forma Calculations

Designed to Illustrate Rate Simplfication Concept *Inputs & Assumptions are **HYPOTHETICAL** and presented for demonstration purposes only*

A. Revenue Requirements *Source: Budget/financial plan development*

Operating Expense - $	225,000,000
Captial Costs - $	275,000,000
Total - $	500,000,000

B. Revenue Requirement Allocation Factors *Source: Historical averages, adjusted for known changes*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Functional Cost Allocation Factors	Cost Pool Allocation Factors								
		Common to All	Detroit Only	Suburban Wholesale	OMID Specific	CSO Facilities	Industrial Waste Control	TOTAL	*Common to All Detail*	
									Flow	*Pollutants*
Operating Expense										
WWTP	70.0%	*100.0%*						100.0%	*22.5%*	*77.5%*
Collection System	11.0%	*60.0%*	10.00%	15.0%	15.0%			100.0%	*60.0%*	
CSO	4.0%					100.0%		100.0%		
Retail Billing	5.0%		100.0%					100.0%		
Industrial Waste Control	10.0%						100.0%	100.0%		
Total	100.0%									
Capital Costs										
WWTP	62.0%	*100.0%*						100.0%	*50.0%*	*50.0%*
Collection System	25.0%	*60.0%*	32.00%	5.0%	3.0%			100.0%	*60.0%*	
CSO	13.0%					100.0%		100.0%		
Retail Billing	0.0%		100.0%					100.0%		
Industrial Waste Control	0.0%						100.0%	100.0%		
Total	100.0%									

PRELIMINARY

DWSD Sewer Rate Model Template - Pro Forma Calculations

Designed to Illustrate Rate Simplfication Concept *Inputs & Assumptions are **HYPOTHETICAL** and presented for demonstration purposes only*

C. Revenue Requirement *Cost Pool* Allocation *Source: **B** (factors) applied to **A** (revenue requirements)*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Functional Cost Allocation	Cost Pool Allocation								
		Common to All	Detroit Only	Suburban Wholesale	OMID Specific	CSO Facilities	Industrial Waste Control	TOTAL	*Common to All (b)*	
									Flow	*Pollutants*
	$	$	$	$	$	$	$	$	$	$
Operating Expense										
WWTP	157,500,000	157,500,000	-	-	-	-	-	157,500,000	*35,437,500*	*122,062,500*
Collection System	24,750,000	14,850,000	2,475,000	3,712,500	3,712,500	-	-	24,750,000	*14,850,000*	-
CSO	9,000,000	-	-	-	-	9,000,000	-	9,000,000	-	-
Retail Billing	11,250,000	-	11,250,000	-	-	-	-	11,250,000	-	-
Industrial Waste Control	22,500,000	-	-	-	-	-	22,500,000	22,500,000	-	-
Total Operating	225,000,000	172,350,000	13,725,000	3,712,500	3,712,500	9,000,000	22,500,000	225,000,000	*50,287,500*	*122,062,500*
Capital Costs										
WWTP	170,500,000	170,500,000	-	-	-	-	-	170,500,000	*85,250,000*	*85,250,000*
Collection System	68,750,000	41,250,000	22,000,000	3,437,500	2,062,500	-	-	68,750,000	*41,250,000*	-
CSO	35,750,000	-	-	-	-	35,750,000	-	35,750,000	-	-
Retail Billing	0	-	-	-	-	-	-	0	-	-
Industrial Waste Control	0	-	-	-	-	-	-	0	-	-
Total Capital	275,000,000	211,750,000	22,000,000	3,437,500	2,062,500	35,750,000	0	275,000,000	*126,500,000*	*85,250,000*
Total Revenue Req't	500,000,000	384,100,000	35,725,000	7,150,000	5,775,000	44,750,000	22,500,000	500,000,000	*176,787,500*	*207,312,500*
less: Industrial Specific (a)	(27,500,000)	(5,000,000)					(22,500,000)	(27,500,000)		*(5,000,000)*
Net Revenue Requirement	472,500,000	379,100,000	35,725,000	7,150,000	5,775,000	44,750,000	0	472,500,000	*176,787,500*	*202,312,500*

(a) Industrial Surcharge Customers *based on % of total ubfluent pollutant loadings that are "surchargeable"* *2.4%*

(b) Relative Flow/Pollutants in CTA Cost Pool *47%* *53%*

PRELIMINARY

DWSD Sewer Rate Model Template - Pro Forma Calculations

Designed to Illustrate Rate Simplfication Concept *Inputs & Assumptions are **HYPOTHETICAL** and presented for demonstration purposes only*

D. SHARES

Source: Simplified flow balance results ("Z" factor)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	CTA SHARE	Detroit Only	Suburban Wholesale	OMID Specific	CSO Facilities	*Share Details* *Flow*	*Pollutants*
Metered Customers							
OMID	16.14%		24.84%	100.00%	2.65%	*14.28%*	*17.42%*
Rouge Valley	12.66%		20.70%		2.96%	*11.90%*	*13.18%*
Oakland GWK	10.40%		17.69%		2.26%	*10.17%*	*10.55%*
Evergreen Farmington	7.37%		11.93%		1.49%	*6.86%*	*7.73%*
NE Wayne Co	5.49%		9.44%		1.17%	*5.43%*	*5.52%*
Allen Park	0.15%		0.24%		0.03%	*0.14%*	*0.16%*
Center Line	0.21%		0.33%		0.06%	*0.19%*	*0.23%*
Dearborn East & West	4.15%		6.72%		0.00%	*3.86%*	*4.34%*
Farmington	0.25%		0.41%		0.05%	*0.24%*	*0.26%*
Grosse Pointe Park	0.37%		0.62%		0.06%	*0.36%*	*0.38%*
Melvindale	0.32%		0.51%		0.07%	*0.29%*	*0.33%*
Grosse Pointe Farms	0.71%		1.18%		0.50%	*0.68%*	*0.72%*
M Total	58.22%	0.00%	94.61%	100.00%	11.30%	*54.40%*	*60.83%*
Detroit + Unmetered							
Dearborn E. (Storm Only)	0.06%		0.15%		1.63%	*0.09%*	*0.05%*
Dearborn N.E.	0.32%		0.81%		0.00%	*0.47%*	*0.43%*
Grosse Pointe	0.19%		0.39%		0.23%	*0.23%*	*0.20%*
Hamtramck	0.80%		1.79%		1.59%	*1.03%*	*0.84%*
Harper Woods	0.05%		0.11%		0.01%	*0.06%*	*0.06%*
Highland Park	1.13%		2.05%		2.06%	*1.18%*	*1.06%*
Small Districts	0.06%		0.08%		0.17%	*0.05%*	*0.05%*
Detroit	39.16%	100.00%			83.00%	*42.51%*	*36.49%*
D+ Total	41.78%	100.00%	5.39%		88.70%	*45.60%*	*39.17%*
Total	100.00%	100.00%	100.00%	100.00%	100.00%	*100.00%*	*100.00%*
Suburbs in D+	*2.62%*	*0.00%*	*5.39%*	*0.00%*	*5.70%*	*3.10%*	*2.68%*
Detroit	*39.16%*	*100.00%*	*0.00%*	*0.00%*	*83.00%*	*42.51%*	*36.49%*

PRELIMINARY

DWSD Sewer Rate Model Template - Pro Forma Calculations

Designed to Illustrate Rate Simplfication Concept *Inputs & Assumptions are **HYPOTHETICAL** and presented for demonstration purposes only*

E. Allocation of Revenue Requirements / Design of Fixed Charges *Source: **D** (shares) applied to **C** (allocated revenue requirements)*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Allocation of Revenue Requirements						Fixed Monthly Charge
	Common to All	Detroit Only	Suburban Wholesale	OMID Specific	CSO Facilities	TOTAL	
	$	$	$	$	$	$	$/mo
Metered Customers							
OMID	61,186,700	0	1,775,900	5,775,000	1,186,400	69,924,000	5,827,000
Rouge Valley	47,994,100	0	1,479,900	0	1,322,700	50,796,700	4,233,100
Oakland GWK	39,426,400	0	1,264,700	0	1,009,500	41,700,600	3,475,100
Evergreen Farmington	27,939,700	0	853,100	0	664,600	29,457,400	2,454,800
NE Wayne Co	20,812,600	0	675,300	0	525,300	22,013,200	1,834,400
Allen Park	583,800	0	17,400	0	13,800	615,000	51,300
Center Line	799,900	0	23,500	0	24,800	848,200	70,700
Dearborn East & West	15,713,700	0	480,200	0	0	16,193,900	1,349,500
Farmington	959,100	0	29,600	0	23,400	1,012,100	84,300
Grosse Pointe Park	1,414,000	0	44,300	0	27,600	1,485,900	123,800
Melvindale	1,194,200	0	36,400	0	33,100	1,263,700	105,300
Grosse Pointe Farms	2,691,600	0	84,600	0	225,500	3,001,700	250,100
M Total	220,715,800	0	6,764,900	5,775,000	5,056,700	238,312,400	19,859,400
Detroit + Unmetered							
Dearborn E. (Storm Only)	238,800	0	10,700	0	729,900	979,400	81,600
Dearborn N.E.	1,213,100	0	58,200	0	0	1,271,300	105,900
Grosse Pointe	727,900	0	28,200	0	102,100	858,200	71,500
Hamtramck	3,040,400	0	127,800	0	713,600	3,881,800	323,500
Harper Woods	204,700	0	7,600	0	5,700	218,000	18,200
Highland Park	4,283,800	0	146,900	0	924,000	5,354,700	446,200
Small Districts	208,500	0	5,700	0	75,300	289,500	24,100
Detroit (a)	148,466,900	35,725,000	0	0	37,142,500	221,334,400	*18,444,500*
D+ Total	158,384,100	35,725,000	385,100	0	39,693,100	234,187,300	19,515,500
Total	379,099,900	35,725,000	7,150,000	5,775,000	44,749,800	472,499,700	39,374,900
Suburbs in D+	*9,917,200*	*0*	*385,100*	*0*	*2,550,600*	*12,852,900*	*1,071,000*
Detroit (a)	*148,466,900*	*35,725,000*	*0*	*0*	*37,142,500*	*221,334,400*	*18,444,500*

(a) Retail rates for Detroit will still contain fixed and commodity charges.

PRELIMINARY

FIGURE 1

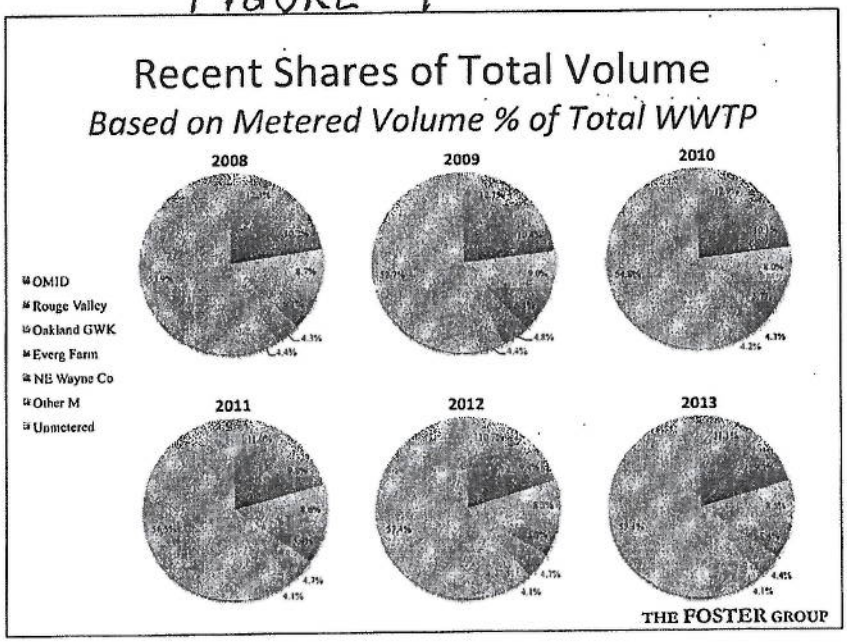
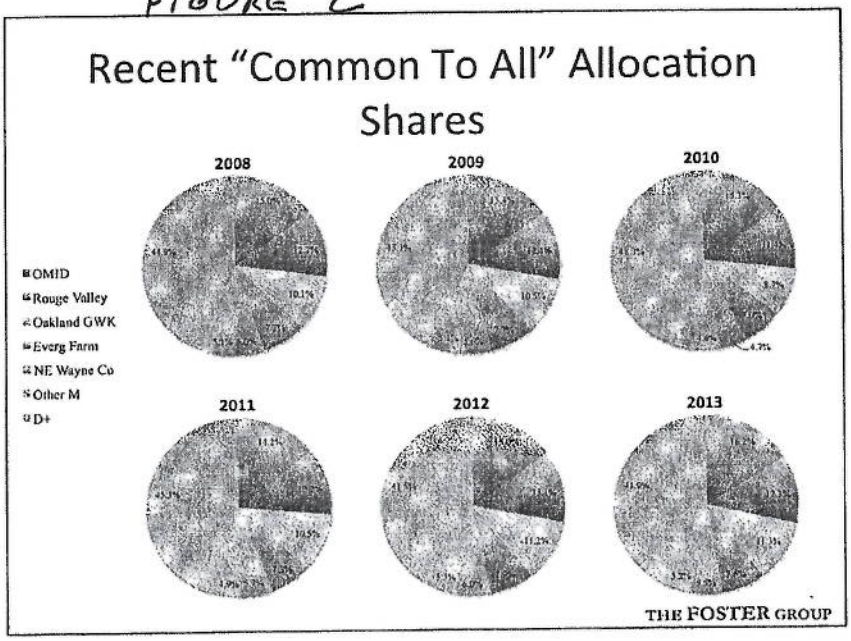


FIGURE 2



Attachment 2

AGREEMENT TO REVISE CSO PROJECT LIST

THIS SETTLEMENT AGREEMENT ("Agreement") is entered into this _____ day of _____, 2013 by and between the City of Detroit by and through its Board of Water Commissioners, the County of Oakland, acting by and through its Water Resources Commissioner, the County of Macomb, acting by and through its Public Works Commissioner, and the County of Wayne.

RECITALS:

A. WHEREAS that parties entered into a certain rate settlement agreement dated September 1, 2000 (known as the "1999 Rate Settlement Agreement") which deals with allocation of costs for wet weather facilities consistent with the projects identified for construction in the NPDES Permit which was issued to Detroit on July 1, 1997, and estimation and determination of responsibility for infiltration/inflow (unaccounted for flows);

B. WHEREAS the United States District Court has ordered that paragraphs 2, 3, 5, 6, 8, 9, 10, 11, and 13 and Exhibit B of the 1999 Rate Settlement Agreement be incorporated in all of the wastewater services contracts between Detroit and its Tier 1 or wholesale customers. Order to Incorporate Rate Settlements into Wastewater Contracts and Dismiss All Prior Rate Settlements (August 31, 2011), *United States v City of Detroit*, Case No. 77-71100 (dkt #2393);

C. WHEREAS the 1999 Rate Settlement Agreement identified specific past, then-ongoing and future wet weather projects and assigned them to one of four customers classes for cost allocation purposes: Detroit only, common-to-all (wastewater treatment plant improvements), 83% Detroit/17% wholesale customers (new wet weather facilities), and customer-specific. Those projects were set forth in Exhibit B to the 1999 Rate Settlement Agreement;

D. WHEREAS all of the projects on Exhibit B have been completed or have been cancelled as not cost-effective as then formulated;

E. WHEREAS the 1999 Rate Settlement Agreement provides that:

> "In the event that DWSD determines that it is reasonable, appropriate or necessary to construct additional wet weather facilities in the future, suburban customers reserve the right to contest the allocation of costs of such facilities to them."

F. WHEREAS Detroit's NPDES Permit was modified on September 26, 2003 to require construction of certain additional projects not included on Exhibit B as follows:

- Oakwood CSO Basin and Pump Station,
- Oakwood District Sewer Improvements, and
- Belle Isle CSO Basin;

G. WHEREAS Detroit's NPDES permit was again modified on March 10, 2010 to eliminate the Upper Rouge Tunnel and the Detroit River Outfall ("DRO-2") projects, provided that Detroit identify substitute CSO control facilities for future construction along the Upper Rouge River to control outfalls which were previously slated to be connected to the now-terminated Upper Rouge Tunnel, and to design and construct a new Rouge River Outfall ("RRO-2") at the wastewater treatment plant as a replacement to the now-terminated Detroit River Outfall (DRO-2) project;

H. WHEREAS Detroit's NPDES permit was again modified on June 28, 2011 (the "Existing NPDES Permit") to require the following additional projects, including certain projects not included on Exhibit B for both conventional CSO control facilities and a new Green Infrastructure Program in the Upper Rouge Tributary Area as follows:

- Construction of ten new Conventional CSO Control Facilities along the Upper Rouge to replace the Upper Rouge Tunnel to be completed and placed in service by 2035,
- Implementation of a Green Infrastructure Program in the Upper Rouge tributary area to be completed by 2032,
- Renovation and structural rehabilitation of the Hubbell-Southfield CSO Basin and the Task 1 In-System Storage Gates by 2014, and
- Construction of ten new Conventional CSO control facilities along the Detroit River to be completed and placed in service by 2045;

I. WHEREAS Detroit is negotiating a new NPDES permit for the period 2013-2017 (the "New NPDES Permit") which will include several wet weather projects not included on Exhibit B, of which three projects are to be constructed prior to the expiration of the New NPDES Permit in 2017:

- New Rouge River Outfall (RRO-2) Segment 2,
- Hubbell-Southfield Basin, and
- Task 1 Gate Renovations

J. WHEREAS the wholesale customers have previously informally contested the allocation of cost for certain of the planned Green Infrastructure Program;

K. WHEREAS the parties have now resolved the challenges to the allocation of Green Infrastructure Projects through 2017 and have agreed on the allocation of conventional wet weather projects that are either i) constructed or presently under construction and not included on Exhibit B, ii) included in the Existing NPDES Permit and not yet constructed, or iii) to be constructed pursuant to the New NPDES Permit, and wish to memorialize the resolutions of these issues through this Agreement.

NOW THEREFORE, in consideration of the foregoing and the mutual promises hereafter the parties agree as follows:

1. Status of Wet Weather Projects on Exhibit B to the 1999 Rate Settlement Agreement.

(a) All projects on Exhibit B to the 1999 Rate Settlement Agreement are deemed to have been completed or abandoned except to the extent they are identified on Exhibit 1 to this Agreement;

(b) To the extent Detroit has incurred capital costs for the facilities on Exhibit B and is incurring operation and maintenance costs, such costs shall be allocated in current and future rates consistent with the allocation established in Exhibit B to the 1999 Rate Settlement Agreement; and

(c) Objections to such capital costs are waived and released with prejudice.

2. Wet Weather Projects Not on Exhibit B to the 1999 Rate Settlement Agreement

(a) The parties agree that the completed wet weather projects on Exhibit 1a are valid and approved wet weather projects and their capital, operating and maintenance costs shall be allocated as set forth in Exhibits 1a.

(b) The parties agree that the wet weather projects now underway and shown on Exhibit 1b are valid and approved wet weather projects and their capital, operating and maintenance costs shall be allocated as shown on Exhibit 1b, subject to Paragraph 3(c) below.

(c) The parties agree that the proposed wet weather projects shown on Exhibit 1c are valid and approved wet weather projects and their capital, operating and maintenance cost shall be allocated as shown on Exhibit 1c, subject to Paragraph 3(c) below.

(d) The parties agree that Detroit may not allocate to the wholesale customers the capital, operating and maintenance costs of any wet weather project not shown on either Exhibit B to the 1999 Rate Settlement Agreement or Exhibit 1a, b and c until and unless this Agreement and Exhibit 1a, b and c are amended by the parties.

3. Green Infrastructure Program

(a) The parties agree that the capital, operating and maintenance costs incurred through June 30, 2017, for green infrastructure wet weather control facilities that 1) are required by the New NPDES Permit, 2) meet the criteria in Paragraphs 3(c)(ii) or (iii) below, and 3) are implemented in the area tributary to the Upper Rouge Tunnel (as defined in Exhibit 2) between July 1, 2010 and June 30, 2017, shall be allocated 83% to the City of Detroit and 17% to wholesale customers. The allocation of these costs among wholesale customers shall be according to the percentages set forth in Exhibit A to the 1999 Rate Settlement Agreement, as Exhibit A may hereafter be amended to address additions or deletions of flow from one or more wholesale customers.

(b) To the extent that green infrastructure wet weather control projects are required within the area tributary to the Upper Rouge Tunnel as part of the 2018-2022

NPDES permit and meet the criteria in Paragraphs 3(c)(ii) or (iii), Detroit, and Wayne and Macomb Counties agree that costs incurred shall be allocated 83% to the City of Detroit and 17% to wholesale customers. Before June 30, 2017, Oakland County agrees to enter into negotiations with regard to the allocation of such costs and with regard to operating and maintenance costs associated with green infrastructure projects implement pursuant to Paragraph 3(a).

(c) Guidelines for Projects Subject to Paragraph 3(a)

The parties agree that the following shall apply to the cost allocation of green infrastructure projects in the New NPDES Permit to be constructed before 2018:

i. Eaves trough and downspout disconnection projects shall be charged 100% to Detroit:

ii. The following types of wet weather control projects may be allocated 83%/17% if the specified criteria are met:

- Demolition of structures if needed to accomplish a specific wet weather control project not consisting entirely of land clearance and involving other elements – e.g., land assembly for a detention pond or drainage swale or tree planting.

iii. All other types of green infrastructure wet weather control projects may be allocated 83% /17% in all circumstances.

(d) The parties agree to negotiate in good faith with regard to the allocation of costs of any other green infrastructure project included in a future NPDES permit or in the DWSD Capital Improvement Program.

(e) Detroit agrees to comply with New NPDES Permit, Section A(5)(a), "Green Infrastructure (GI) Program – Tributary Area for Rouge River Outfalls."

(f) Detroit will account for and report to the wholesale customers the actual capital, operating and maintenance costs incurred for green infrastructure on a fiscal year basis and by June 30, 2017 prepare a five-year projection of operating and maintenance costs for the green infrastructure constructed or to be constructed pursuant to the New Permit.

4. Wet Weather Projects to Be Constructed after 2017. Consistent with the 1999 Rate Settlement Agreement, the capital, operating and maintenance costs of wet weather facilities constructed or to be constructed by DWSD in the future and not listed on Exhibit 1 that alleviate combined sewer overflows from Detroit's wastewater transportation, conveyance and treatment system and that will reduce flows into sewers that contain or will contain wet weather flows generated from both inside and outside the City of Detroit shall be allocated between Detroit and the wholesale customers on a 83%/17% basis. The foregoing does not apply to green infrastructure projects subject to Paragraph 3(b).

5. Except as may be modified herein, the wastewater contracts between parties and the surviving rate terms as defined in the Court's Order of August 31, 2011, remain in full force and effect unless such surviving rate terms are amended or modified by a separate agreement.

6. Detroit and the three Counties shall amend their wastewater services contracts to incorporate the terms of this Agreement and Detroit shall obtain similar amendments in all of the other wholesale customers' contracts.

MACOMB COUNTY

CITY OF DETROIT

By: _____

By: _____ Its: _____

Its: _____

OAKLAND COUNTY WAYNE COUNTY

By: _____ By: _____

Its: _____ Its: _____

EXHIBIT 1

APPROVED WET WEATHER FACILITIES

Project Description	Actual Capital Cost	Cost Allocation (Detroit/Suburban)
a. Completed Facilities Not on Exhibit B		
• Belle Isle CSO Basin	$16.1 M	100% / 0%
• Oakwood CSO Basin & Pump Station (082)	$168.7 M	
a. CSO Basin		83% / 17%
b. Pump Station		Common-to-all
• Oakwood District Sewer Improvements	$27.0 M	100% / 0%
• Detroit River Outfall (DRO-2)	$88.2 M	Common-to-all
	Estimated Cost	
b. Facilities Under Construction and Not on Exhibit B		
• Rouge River Outfall Segment 1 (RRO-2)	$14.4 M	Common-to-all
• Green Infrastructure (2010-12) (059-069, 072-075, 077, 079)	(Max) $9.0 M	Para. 3(c)
c. Facilities to be Constructed Pursuant to New NPDES Permit		
Facilities to be constructed by 2017:		
• Green Infrastructure (2013-2017) (Outfalls 059-069, 072-075, 077, 079)	$15.0 M	Para. 3(c)
• Rouge River Outfall Segment 2 (RRO-2)	$91.0 M	Common-to-All
• Hubbell-Southfield Basin Renovations, Task 1 Gate Rehab.	$19.0M	83% / 17%
• In-System Storage Gate Renovation (Outfalls 059, 060, 061, 065, 069, 072, 074)	$2.0M	83% / 17%
Facilities to be constructed after 2017:		
• Green Infrastructure (2018 -) (Outfalls 059-069, 072-075, 077, 079)	$26.0 M	TBD