Detroit Water and Sewerage Department

Wastewater Master Plan

DWSD Project No. CS-1314

Recommended Standard Provisions for Wholesale Contracts

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Recommended Standard Provisions for Wholesale Contracts

1. Objective

The objective of this report is to develop recommendations regarding provisions that should be included in all DWSD sewer wholesale agreements. These standardized provisions are intended to increase the conformity of the agreements and to improve DWSD's control of the wholesale agreements. The impetus for this analysis comes at least in part from our previous evaluation of wholesale agreements where it was concluded that wholesale customers have a contractual right to discharge in excess of 1.3 billion gallons per day to the system, although many communities do not typically discharge near their contractual amounts. At the same time, some communities are seeking to increase their contractual amounts.

2. Scope of Work

This work is a continuation of our evaluation of the Department's wholesale agreements. Previously, we had reviewed and evaluated each of the Department's wholesale agreements. The focus of that review was to determine the amount of contractual capacity committed by those agreements. (The previous analysis is attached as Appendix A to this memorandum.) As part of that initial review, we also assessed other contractual provisions. In this task, we have reviewed the wholesale contracting process of several other utilities that provide wholesale service to identify practices or provisions that would improve DWSD's agreements.

We have developed this evaluation by:

- Evaluating each of the Department's existing contracts
- Identifying comparable utilities and examining the contractual structure used by these utilities. We have examined the contractual structures for the Massachusetts Water Resources Authority, the Metropolitan Council of Environmental Services (MN), the Metropolitan Water District of Southern California, and the City of Houston Utilities Department. We have also examined inter-municipal agreements for a number of smaller entities in the Northeast.
- Highlighting concepts that would strengthen and rationalize the Department's current contractual structure.

3. Background

The DWSD's sewerage system serves an area of approximately 904 square miles in the City of Detroit, and communities in Wayne, Oakland, and Macomb Counties. Sewerage service is provided on a retail basis within the City of Detroit and on a wholesale basis to approximately 76 communities in the three counties.

Service to outside communities is governed by 23 wholesale service agreements that have been negotiated between the City and the outside community. The 23 wholesale service agreements are held by a total of 17 municipalities or counties. The 17 "Tier one" communities have, in some cases, then contracted with other communities to enable these communities to participate in the DWSD system. These "subcontracts", in effect, allocate the Tier One customers allowed capacity among several communities. The DWSD has retained the right to review these Tier Two community agreements.

The Department's wholesale agreements have been executed over the past 85 years. As a result, the agreements are not necessarily in the same format and in some cases focus on different issues. As an example, the contracts use a variety of formats and requirements regarding allowed capacity.

4. Contract Principles

This section sets forth the Contract Principles that the Department should consider including in all of its wholesale agreements. Some of these principles may be included in some of the Department's existing contracts, but not all of them. We believe that the Department would be well served by standardizing its service contracts to the maximum extent possible. This will ensure that all wholesale customers are treated equitably and similarly. This also provides the Department with the same rights and controls across all agreements.

In this report, we have not set forth any Contract Principles regarding the allocation of costs among wholesale customers through the Department's rate methodology. The existing rate methodology has been memorialized within each agreement using a methodology approved by the Federal court. We would anticipate that this methodology, however it maybe modified in the future, will be an element of any modified agreements proposed by the Department to wholesale customers.

We set forth Contract Principles that would clarify and improve the Department's wholesale agreements. However, a major issue that the Department will need to grapple with is what process or processes are available that will enable the Department to modify all of its existing wholesale service contracts.

4.1 Contract Term

The Department's existing contracts have terms ranging from several decades to unspecified or no term. This makes it very difficult to update the contracts to incorporate new provisions necessitated by changing events, new facilities or new regulatory policies, etc. We have found that it is relatively common for wholesale service agreements to have a renewal term; frequently a term of 20 to 25 years is used.

The Department should consider standardizing contracts with a renewal term of 20 years. It would be preferably to have the contracts on a rolling schedule and not to have all contracts, or even most of the contracts, subject to renewal at one time.

4.2 Contract Renewal

It would be very disruptive to both DWSD and its wholesale customers, if the contracts were subject to significant modification. The agreements need to incorporate the philosophy that the intent is to renew them and that the expectation is that the agreement will be renewed. The renewal should not be seen as a major restructuring of the economic deal between DWSD and the wholesale customer. Rather, it will provide for the fine-tuning of the agreement.

However, the wholesale customer would have the right, if it so chose, to seek service from another entity. Similarly, the Department might determine that because of unusual circumstances that it will not continue to provide service. For example, if a wholesale customer had failed to pay its share of the costs for an extended period of time or was unwilling to comply with certain regulatory requirements that must be passed through to the wholesale customer as part of the Department's NPDES permit or other regulatory requirements.

4.3 Flow Limitations

As seen in Appendix A, the Department's existing contracts establish flow limits from each customer using a variety of methods. In addition, the Department's wholesale agreements authorize wholesale agreements to use a significant amount of total available capacity, potentially reaching and/or exceeding the capacity of the treatment plant. These capacity allocations do not include the flow from the City of Detroit. However, there is not a significant likelihood that wholesale customers will begin to discharge at their full contractual limit. However, the wholesale communities have a right to a significant quantity of flow that may inhibit the District's short and long-term planning and management of the system.

As an example, the current situation creates the following type of problem. Due to the need to control wet weather flows or accommodate growth, a number of communities have sought to increase their capacity allocation.

However, technically, the Department has very little, if any, capacity to allocate once communities discharge at their capacity limit and the requirements for the City of Detroit are added to the wholesale customer's contractual capacity. The Department may find it very difficult to honor requests for increased capacity, since technically it

has little or no contractually available capacity. There are no mechanisms within the current contractual structure that enable the Department and the wholesale customers to rationalize the allocation of capacity in the system. This may result in each wholesale customer bearing more costs than necessary because capacity is unutilized and communities needing capacity are unable to obtain it.

As a contract principle, the agreements should require each wholesale customer to request their required capacity for the next contract term, with this process repeated at each renewal date.

4.4 Flow Enforcement Provisions

To ensure the Department maintains control of the system, it will be necessary to include penalty provisions to encourage compliance with the contractual flow conditions. Communities exceeding their contractual limitations would be subject to penalty provisions.
It is common to provide some grace amount, 20 percent for example, before penalties are imposed. Under these provisions, a community would not be subject to penalties unless actual flow exceeded the contractual limit by more than 20 percent.

Similarly, to discourage communities from "hoarding" capacity, any community that used less than 70 percent of its requested annual capacity would be subject to financial penalties. Communities reserving significantly excess capacity limit the ability of the Department to put that capacity to productive use for the benefit of all customers.

4.5 Flow Measurement

The DWSD contracts use a variety of units to establish each community's contractually allowed flow amount. For ease of comparison and analysis, each community's flow limits should be expressed in the same units. This might be cubic feet per second, gallons per day or some similar measure.

We also believe that it would be appropriate to include both an annual average limitation as well as a daily maximum. This would provide some flexibility in the event of a storm event or other peak occurrence.

4.6 Contractual Flow Trading

This proposed contractual structure puts a significant burden on Communities to actively evaluate and manage their anticipated wastewater flows. They would be subject to penalties for not discharging enough or for discharging too much. Consequently, communities should be granted the right to shift capacity among wholesale customers for whatever consideration the two parties determine.

The Department should retain the right to preclude a wholesale customer from trading capacity with a community that is not an existing Tier 1 or Tier 2 customer without the Department's explicit approval. Of course, a community selling or transferring capacity to another wholesale customer would then be subject to flow

exceedance penalties at the new lower volume. The purchasing wholesale community will have its rights increased accordingly. A community will also be able to reduce its capacity any time during the term of the capacity agreements. The Department would determine on a case-by-case basis whether any consideration would be granted for such reductions.

4.7 Buy in Charge

Several wholesale communities have requested an increase in their allotted capacity and communities not served by DWSD have sought information on acquiring capacity. Other major wholesalers have developed a buy-in charge, which is an up-front fee paid by a customer for the right to discharge, or increase its discharge to the wholesaler's system. The customers presently served by the DWSD (or any other wholesaler) have paid to have that capacity available (typically through debt service payments paid to finance construction.) The buy-in charge compensates the existing wholesale customers for the investment that they have already made in the system.

As a contract principle, the Department should establish a formal process for new wholesale customers to acquire capacity or for existing wholesale customers to increase their capacity rights. A new customer would be required to pay a buy-in charge equal to the pro rata value for the portions of the system that the new customer will use. This can be based on the net capital cost (construction less grants less principle to be paid) or asset value (original cost less depreciation). Appendix B is an example of such a policy used by the Massachusetts Water Resources Authority.

In particular, Appendix B summarizes the authority's water policy, which is identical to the policy and procedures used for applications to the wastewater system.

4.8 Sewer Use Ordinance

The Department must regulate the materials discharged into the sewer system to protect the integrity of the treatment process. Towards that end, the Department has developed and the City has adopted a sewer use ordinance that regulates such discharges. Since the City receives flows from beyond the City's boundaries, it is necessary to require that all wholesale customers adopt a sewer use ordinance mirroring the one enacted by the City. Those ordinances should also grant the Department the right to inspect private companies to ensure compliance with the Department's Industrial Pretreatment program.

4.9 Regulatory Compliance

The Department is responsible for compliance with all applicable federal and state law as well as regulations. To enable the Department to comply with the applicable regulations, the Department needs to have the ability to "share" this compliance responsibility with the wholesale customers. The Department should retain the right to:

- Pass through any relevant sections of the Department's NPDES permit.
- Pass through state environmental regulations and permits.

- Requiring the wholesale customers to manage their system in compliance with the CMOM and other comparable regulations.
- Requiring the wholesale customer to take all reasonable steps to identify violators of the regulatory and sewer use regulations and to take all appropriate enforcement actions.
- Requiring the wholesale customers to minimize or reduce infiltration and inflow as necessary to comply with permitted flow limits and to minimize capital improvements related to capacity increases

4.10 Construction and Physical Sewer System Requirements

The Department should require all wholesale customers that are constructing sewers and other connected facilities to construct all such facilities to the Departments standards and specifications. This is necessary to ensure that the sewers are of comparable quality and to minimize the amount of inflow and infiltration that can enter the system. Similarly, major pumping stations and metering stations should be subject to similar standards. To the extent that any metering facility is used for billing purposes, then the wholesale customer should be required to calibrate that meter annually at its own costs. The Department will retain the right to independently verify the accuracy of any such meter.

4.11 Connection Points

Each Contract should explicitly define (with a map) the exact location and configuration of all authorized connections between the wholesale customer's system and the Department's system. This provides a means of identifying and safeguarding against unauthorized and/or un-metered connections.

4.12 Tier 2 Customers

The Department has allowed Tier 1 communities to subdivide their contractually approved flows. As a contract principle, the Department should retain the explicit right to review and approve any Tier 2 agreement between the Tier 1 wholesale customer and Tier 2 communities. The Department's review should be limited to ensuring that the Tier 2 contract:

- Requires the Tier 2 community to adopt the sewer use ordinance, grants the Department the right to monitor and enforce the pretreatment program and that the Tier 2 community has an affirmative right to comply with all applicable law.
- Ensuring that the Tier 2 contract does not result in the Tier 1 community to exceed its contractual flow requirements.
- Protects the Department from liability claims in the event that an emergency precludes it from providing service.
- Given the economic penalties associated with under-using capacity, the Department should not arbitrarily withhold its approval of any Tier 2 flow allocation.

4.13 Allocation of Costs

The contracts must include a provision that sets forth the method for allocating operation, maintenance, system-wide capital and administrative costs and setting rates for each wholesale customer. Because of the recent contract amendments stipulating a rate methodology, these provisions exist in significant detail.

Obviously, there may be changes necessary in that methodology to reflect the current work to implement the rate agreement associated with the combined sewer overflow program. In addition, some changes may be necessary to reflect the proposals discussed in Section 2 above.

4.14 Future Improvements

The Department and the wholesale customers need to understand how their costs will likely change in the future as capital improvements are planned and implemented. As a principle, the contracts need to define how the costs of future improvements will be allocated. Similar to the Department's existing cost allocation methodology, it will be necessary to define at least three types of capital improvements:

- System-wide improvements, where the costs are borne in proportion to each customer's share of system costs as determined by the overall allocation of costs.
- Specialized system-wide improvements, which would be projects that impact the entire system, but where the benefit of the project is not in proportion to general cost allocations.
- Specialized projects that benefit a limited number of customers, with the costs shared among the beneficiaries. Frequently, the cost of new interceptors is shared among the benefiting communities in proportion to their required share of the interceptor's capacity. This type of project would include improvements to the Detroit retail service system, where only City of Detroit customers benefit and would be required to pay.

4.15 Contract Administration and Enforcement

The Department's agreements with wholesale customers will be in place for a very long time. Thus, an important set of principles relates to establishing a process for enforcing, modifying and resolving disputes. These typically include:

- Timely payment. Wholesale customers should be required to make payments within [45] days of invoicing date for any amounts not in dispute. Failure to pay in that period of time should cause the community to be subject to financial penalties.
- Dispute Resolution. The contract should have provisions establishing a process by which disputes between the Department and wholesale customers get resolved.

- These typically include one set of provisions for billing disputes (how much service was received) and separate procedures for fundamental interpretations of the contractual terms. Dispute resolution provisions do not preclude either party's ability to seek a judicial involvement.
- Liability. DWSD should seek provisions that protect it from consequential and other forms of damage in the event that it is unable to provide treatment capacity because of events beyond its control. Wholesale communities may desire reciprocal treatment.
- Fair Employment Law. The Department's current contracts require all wholesale customers to comply with fair employment laws. The Department will likely desire that to be continued.
- Assignment. The contracts will need to spell out whether the agreement can be assigned or let to a third party and under what conditions with what types of approvals.
- Default provisions. The contract will need to define for each party what actions constitute failures to perform, the period of time the defaulting party will have to cure the default and the penalties associated with default. Generally, default provisions focus on failing to pay and consistently exceeding the contractual flow limits.

APPENDIX A

Appendix A
Overview of Existing Agreements

Introduction

This appendix summarizes Camp Dresser & McKee's review of the wholesale agreements between the Detroit Water and Sewer Department (the "DWSD" or "Department") and its first-tier community customers. Generally, DWSD customers can be divided into first and second tier communities depending on whether they contract for sewer treatment service directly from DWSD, or if they have subcontracted with other communities to receive wastewater service from DWSD. A community that has not contracted directly with DWSD for wastewater service is called a second tier body. For the purpose of this memorandum, we assess the contractual relationship between first tier communities and DWSD.

This memorandum focuses on two general aspects of the existing contractual relationship:

> General contractual provisions regarding terms and conditions for service and the rights and responsibilities of each party.
>
> The capacity limits within each contract that set the flow that each community is legally granted. The memorandum includes a specific discussion of the allowed discharges from each community.

This memorandum is intended to provide a broad overview of these issues to provide a starting point for understanding and developing recommendations to modify the existing agreements as new issues arise and agreement come up for renewal. An important concern is that the DWSD has contracted out quantities exceeding the Department's treatment capacity, even before flows from the City of Detroit are included. This has been primarily a theoretical problem, since the timing of peak discharges and the level of discharges from many of the communities is less than the legal entitlement. However, as the Master Plan moves forward, this issue may increase in importance and may become more of a real problem. A related issue is that many communities have approached the DWSD to obtain increases in their capacity allotments. As more communities address wet weather discharge issues and experience population and employment growth, this issue will increase in importance.

Contractual Provisions

Each of the contracts generally includes the following general provisions regarding Conditions of Service, Basis of Charges, and finally Capacity Allotment. The first two elements are described in general terms.

Conditions of Service:

Type of Service: Sewer service received by communities may vary. For example, in certain cases, CSO or wet weather flow abatement may be part of a contractual agreement.

***Term of Contract*:** A typical contract length is 40 years. In some cases, there is no contractual limit. Variations may occur and are specified in the contractual disposal agreement.

***Total Contract** Quantity*: In some cases a contract specifies the maximum quantity that a community is allowed to discharge under the agreement. Limits can be expressed as fixed quantities, volume based on population, volume per second, or as a storm event.

Minimum Charges: Communities may negotiate a minimum charge regardless of the actual consumption in a particular billing period. Additional charges are added if the minimum quantity is exceeded.

Provisions for Discharges in Excess of Contract Quantities: Communities may negotiate the cause of action if the contractual limits are exceeded. Penalty fees or other additional charges may be the result of the exceeded contractual flow limit.

***Peak Rates of Delivery*:** Sewer agreements may specify a maximum peak rate of discharge measured over a specified period of time. The peak rates may also be determined as the result of certain storm events, i.e. CSO abatement policies.

***Sellers' rights to sell to others*:** The sewer agreement may specify to what extent the seller, i.e. the party accepting discharge into its system, is allowed to contract with other communities and offer sewer services. The reason for this provision may be the fact that the party receiving service wants to guarantee that the overall capacity of the system is not contractually exceeded.

***Sellers' rights to curtail delivery*:** A sewer contract may specify to what extent the selling party is allowed to discontinue and/or reduce sewer service to its contractual partners. In most sewer agreements, this provision applies to an emergency situation and allows the seller to curtail service if its sewer system was endangered by any incoming flow.

***Buyers' rights to resell to others*:** The buyer and seller of sewer service may contractually agree that the buyer is allowed to resell service to a third party. In case of DWSD and its communities, this would be the case of a second tier community acquiring service from a first tier community.

***Special Delivery Conditions*:** These may vary and represent additional conditions connected to the provision of sewer service.

Basis for Charges:

***Type of Rate & Applicable Rate Schedule*:** Rates may be set up for different cost components such as volume, capacity, or wastewater strength related factors, i.e. BOD and TSS.

***Basis of Rate Determination*:** In the determination of a wastewater rate, either a cash or a utility approach may be used to perform a rate analysis and develop a rate schedule. The former requires revenue requirements to be set up so that

annual cash needs are met, whereas the latter incorporates financial components such as return on investment and depreciation.
***Basis for Rate Revision*:** A sewer discharge contract may specify in what intervals rate reviews shall be conducted and what principles shall be used in its conduct.
Billing Practice: Sewer agreements usually specify the billing frequency and any other billing related factors between the buyer and seller of the service.
***Flow Measurement for Billing*:** For billing purposes, the volume discharged by a community needs to be measured. In most cases, this is accomplished by installing main sewerage meters at the entrance point to the seller's system. Furthermore, a tolerance range may be calculated to compensate for any potential measurement errors.

Community Specific Contractual Provisions
DWSD has contractual obligations with a large number of communities in the greater Detroit area. The core group of first tier communities includes the following municipalities:

- Allen Park
- Centerline
- Clinton - Oakland District
- Dearborn, consisting of:
    - Dearborn East
    - Dearborn Northeast
    - Dearborn West
- Evergreen - Farmington District
- Farmington
- Grosse Pointe
- Grosse Pointe Farms
- Grosse Pointe Park
- Hamtramck
- Harper Woods
- Highland Park
- Macomb County
- Melvindale
- NE Wayne County
- Redford Township
- Rouge Valley
- SE Oakland County District
- Wayne County Area #3
- Wayne County Area #6

Each community has negotiated separate sewerage disposal agreements with DWSD. In many cases, numerous amendments have followed the original contract and have made revisions and alterations to the agreement. Table A-1 provides historic wastewater flows by community for the years 1995 through 1999. Tables A-2 and A-3

show the different contractual provisions, first illustrating conditions of service and then basis for charges.

Contractual Flow Limitations:
As one of the contract provisions, DWSD may limit the quantity of flow accepted into its system. This provision appears regularly in contracts between DWSD and surrounding communities. The following list provides a community-by-community overview of flow limits. In particular, we have grouped the communities by the following four categories:

- Group 1: Population based flow limit set in contract.
- Group 2: Peak flow (Cubic feet per second) rate set in contract.
- Group 3: Storm Event determines flow limit.
- Group 4: No limitation.

Group 1: Population based flow limit set in contract
City of Allen Park
Allen Park has a sewerage agreement with DWSD with a contract limit of 0.4 CFS per 1,000 population or industrial hydraulic equivalent. The current agreed upon contract capacity is 7.4 CFS, which includes a mutually accepted industrial hydraulic equivalent flow.

CONTRACTUAL DRY WEATHER FLOW:	**233,000 TCF**
	4.78 MGD

Clinton – Oakland District
The Clinton – Oakland District specifies in its sewerage agreement with DWSD a projected flow of 0.4 CFS per 1,000 population. The contractual limit has been calculated using the population as estimated by the 2000 Census.

CONTRACTUAL WASTEWATER FLOW:	**3,080,000 TCF**
	63.0 MGD

City of Dearborn: (Dearborn East, Dearborn Northeast, Dearborn West)
The contract between DWSD and the City of Dearborn specifies a restriction of 324 gallons per day per citizen. This number stems from a 1957 Sewer Use Agreement and the contract assumes that the flow is discharged into the Oakwood Interceptor. For general billing purposes, flow is metered and charged based on the meter readings. The contractual limit has been calculated using the population as estimated by the 2000 Census. Moreover, an August 25, 1961 agreement, in addition to the original contract, limits sewer flow into the Northwest Interceptor to 50 CFS.

CONTRACTUAL WASTEWATER FLOW:	**3,130,000 TCF**
	64.2 MGD

Macomb County
The DWSD contract with Macomb County refers to a flow limit of 0.4 CFS per 1,000 population.

CONTRACTUAL WASTEWATER FLOW: **4,610,000 TCF**
94.5 MGD

City of Melvindale
The sewer agreement between the City of Melvindale and DWSD has been updated several times. The initial limit was set as 6.375 CFS. The latest amendment in 1970 sets out a contractual flow limitation of 0.5 CFS per 1,000 population. The contractual limit has been calculated using the population as estimated by the 2000 Census.

CONTRACTUAL WASTEWATER FLOW: **170,000 TCF**
3.48 MGD

Group 2: Peak flow (Cubic feet per second) rate set in contract
City of Centerline
The City of Centerline originated service in 1960 with an original flow limitation of 6.5 cubic feet per second (CFS). The flow allocation has not been modified since the original contract was signed.

CONTRACTUAL WASTEWATER FLOW: **204,984 TCF**
4.2 MGD

Evergreen – Farmington District
The original contract specifies a limit of 7.5 CFS. Subsequent amendments increase the limit to 170 CFS.

CONTRACTUAL WASTEWATER FLOW: **5,361,120 TCF**
109.9 MGD

City of Farmington
Flow is metered and charged based on the meter readings. The peak discharge rate is equal to 6 CFS.

CONTRACTUAL WASTEWATER FLOW: **188,000 TCF**
3.88 MGD

City of Grosse Pointe
The total capacity for all Grosse Pointe settlements is stated as 840 CFS based on maximum sewer capacity.

CONTRACTUAL WASTEWATER FLOW: **26,490,240 TCF**
542.87 MGD

City of Grosse Pointe Farms

Grosse Point Farms flow allowance is theoretically included in the overall Grosse Point limit. However, Grosse Point Park has a separate agreement calling for a capacity of 554 CFS.

CONTRACTUAL WASTEWATER FLOW: **17,470,000 TCF (included in Grosse Pointe total above)**
358 MGD

City of Grosse Pointe Park
Grosse Point Parks flow allowance is theoretically included in the overall Grosse Point limit. However, Grosse Point Park has a separate agreement calling for a capacity of 84 CFS.

CONTRACTUAL WASTEWATER FLOW: **2,649,024 TCF (included in Grosse Pointe total above)**
54.29 MGD

City of Hamtramck
The City of Hamtramck's contract with DWSD specifies a limit of 1,244.5 CFS for wastewater flow.

CONTRACTUAL WASTEWATER FLOW: **39,250,000 TCF**
804 MGD

Northeast Wayne County
Flow is limited to 127 CFS as of the 1961 amendment with an additional emergency shut-off clause attached to the contract.

CONTRACTUAL WASTEWATER FLOW: **4,005,072 TCF**
82.08 MGD

Redford Township
The 1951 contract sets the flow limit at 40 CFS per annum.

CONTRACTUAL WASTEWATER FLOW: **1,261,440 TCF**
25.85 MGD

Rouge Valley District
Based on the 1961 agreement, the second tier communities have contracted with the Rouge Valley District for a maximum flow of 380 CFS. There has been a recent amendment to the agreement.

CONTRACTUAL WASTEWATER FLOW: **11,980,000 TCF**
246 MGD

Southeast Oakland County District
This agreement has been amended several times. The latest maximum has been increased by 80 CFS based to 260 CFS.

CONTRACTUAL WASTEWATER FLOW:	**8,199,360 TCF**
	168.0 MGD

Group 3: Storm Event determines flow limit
City of Highland Park
The 1962 sewer relief agreement lays out the emergency purchase of stormwater relief in the amount of 6.74 CFS (equivalent to the run-off of a 10-year rainfall). The correct runoff of the equivalent 2001 storm event may significantly differ. No estimate has therefore been provided.

CONTRACTUAL WASTEWATER FLOW:	**TBD**
	TBD

Group 4: No limitation
City of Harper Woods
Flow is metered and charged based on the meter readings. No contractual limitation or minimum requirement could be determined.

CONTRACTUAL WASTEWATER FLOW:	**None**
	None

Wayne County Area #3
Flow is metered and charged based on the meter readings. No contractual limitation or minimum requirement could be determined.

CONTRACTUAL WASTEWATER FLOW:	**None**
	None

Wayne County Area #6
Flow is metered and charged based on the meter readings. No contractual limitation or minimum requirement could be determined.

CONTRACTUAL WASTEWATER FLOW:	**None**
	None

TOTAL CONTRACTUAL WASTEWATER FLOW LIMIT	**108,000,000 TCF**
	= 2,210 MGD

The above list of communities, operating under a sewerage agreement with DWSD, has shown the differences in the individual contracts. Most contracts specify a flow restriction with actual usage being metered and billed accordingly.

The total wastewater flow volume that could be documented equals 2,210 Million Gallons per Day (MGD). This excludes flows from the City of Detroit and the three communities above which have no contractual limit.

Table A-1. Historic Wastewater Flows by Wholesale Customer (Million Cubic Feet)

	1999	1998	1997	1996	1995
Allen Park	33,441	33,834	33,350	33,264	33,258
Centerline	69,426	71,587	73,838	77,194	74,328
Clinton - Oakland District	1,397,710	1,441,615	1,471,891	1,304,612	1,263,307
Dearborn East	469,827	469,432	509,829	478,907	463,377
Dearborn Northeast	46,631	45,540	43,258	46,364	42,893
Dearborn West	608,465	674,813	672,987	654,578	626,725
Evergreen - Farmington District	1,950,150	2,195,100	2,368,080	2,352,840	2,162,330
Farmington	65,094	79,344	86,057	82,864	79,510
Grosse Pointe	47,306	47,139	46,383	45,494	43,227
Grosse Pointe Farms	95,342	79,566	81,838	88,861	89,731
Grosse Pointe Park	84,055	112,800	125,957	130,331	159,021
Hamtramck	111,765	117,745	110,714	117,260	115,970
Harper Woods	7,025	6,736	6,691	7,168	6,732
Highland Park	228,657	242,793	273,206	273,781	283,548
Macomb County	1,948,571	1,872,693	1,803,079	1,643,868	1,748,358
Melvindale	85,947	100,197	98,125	89,559	92,371
NE Wayne County	1,315,085	1,819,068	1,895,001	1,472,684	1,476,841
Redford Township	2,452	2,316	2,360	2,411	2,373
Rouge Valley	4,331,183	3,358,936	4,564,938	4,552,810	4,424,224
SE Oakland County District	3,335,552	3,190,649	3,209,401	3,195,473	3,257,724
Wayne County Area #3	473	460	464	604	475
Wayne County Area #6	4,968	4,840	4,882	5,398	5,456
Total	16,239,125	15,967,203	17,482,329	16,656,325	16,451,779
Wholesale Total (MGD)	**332.79**	**327.22**	**358.27**	**341.34**	**337.15**
City of Detroit	6,140,407	6,542,524	6,917,220	7,322,836	6,955,741
Total	22,379,532	22,509,727	24,399,549	23,979,161	23,407,520
Grand Total (MGD)	**458.63**	**461.30**	**500.02**	**491.41**	**479.69**

Table A-2. Contract Provisions: Conditions of Service

First Tier Communities	Contractual Provisions								
	Type of Service	Customer since	Term of Contract	Minimum Charges?	Provisions for discharge in excess of contract Quantities	Sellers rights to sell to others	Sellers rights to terminate service	Buyers rights to resell to others	Special Delivery Conditions
Allen Park	Sewer (Separated)	1959	Infinite (minimum 7-10-2009)	Yes	None	Not curtailed	Temporary discontinuation allowed without liability	Not curtailed	N/A
Centerline	Sewer (Separated)	1960	9-13-1995 (renewable)	No	Automatic shut-off to guarantee limit, excess capacity charges apply	Not curtailed	Emergency discontinuation allowed without liability	Not curtailed	N/A
Clinton - Oakland District	Sewer (Combined)	1968	Until 2018	Yes	None	Consent from communities needed when serving outside of district, otherwise no consent	Temporary discontinuation allowed without liability	Not curtailed	N/A
Dearborn East	Sewer (Separated)	1949	Depends on agreement	No		Not curtailed	Not curtailed	Not curtailed	N/A
Dearborn Northeast	Sewer			No		Not curtailed	Not curtailed	Not curtailed	N/A
Dearborn West	Sewer (Combined)			No		Not curtailed	Not curtailed	Not curtailed	N/A
Evergreen - Farmington District	Sewer (Combined)	1956	Expiration 8-29-2034	Yes	YES, 1956 Contract specifies payment for each CFS capacity.	Not curtailed	Not curtailed	Not curtailed	N/A

Table A-2. Contract Provisions: Conditions of Service

First Tier Communities	Contractual Provisions								
	Type of Service	**Customer since**	**Term of Contract**	**Minimum Charges?**	**Provisions for discharge in excess of contract Quantities**	**Sellers rights to sell to others**	**Sellers rights to terminate service**	**Buyers rights to resell to others**	**Special Delivery Conditions**
Farmington	Sewer (Combined)	1956	9/1991	No	Yes	Not curtailed	Not curtailed	Not curtailed	N/A
Grosse Pointe	Sewer	1938	Indefinite	No	N/A	Not curtailed	Not curtailed	Not curtailed	N/A
Grosse Pointe Farms	Sewer	1938	Indefinite	No	N/A	Not curtailed	Not curtailed	Not curtailed	N/A
Grosse Pointe Park	Sewer (Combined)	1938	Indefinite	No	N/A	Not curtailed	Not curtailed	Not curtailed	N/A
Hamtramck	Sewer	1928	Indefinite	No	No	Not curtailed	Not curtailed	Not curtailed	N/A
Harper Woods	Sewer	1940	Indefinite	No	No	Not curtailed	Not curtailed	Not curtailed	N/A
Highland Park	Sewer	1916		No	No	Not curtailed	Not curtailed	Not curtailed	N/A
Macomb County	Sewer (Combined)	1962	2002	Yes	No	Not curtailed	Temporary discontinuation allowed without liability	Not curtailed	N/A
Melvindale	Sewer (Separated)	1955	2012	No	No	Not curtailed	Temporary discontinuation allowed without liability	Not curtailed	N/A

Table A-2. Contract Provisions: Conditions of Service

First Tier Communities	Contractual Provisions								
	Type of Service	Customer since	Term of Contract	Minimum Charges?	Provisions for discharge in excess of contract Quantities	Sellers rights to sell to others	Sellers rights to terminate service	Buyers rights to resell to others	Special Delivery Conditions
NE Wayne County	Sewer (Combined)		2001	Minimum charge based on annual average.	Yes	Not curtailed	Not curtailed	Not curtailed	N/A
Redford Township	Sewer	1935	Indefinite	Yes. 1951 contract specifies fixed drainage charge.	No	Not curtailed	Not curtailed	Not curtailed	N/A
Rouge Valley	Sewer (Combined)			No	No	Not curtailed	Not curtailed	Not curtailed	N/A
SE Oakland County District	Sewer (Combined)	1942	2012	No	Yes	Not curtailed	Yes, if charges are outstanding for 3 months	Not curtailed	N/A
Wayne County Area #3	Sewer		Indefinite	No	No	Not curtailed	Not curtailed	Not curtailed	N/A
Wayne County Area #6	Sewer			Yes (Amount specified)	No	Not curtailed	Not curtailed	Not curtailed	N/A

Table A-3. Contract Provisions: Basis of Charges

First Tier Communities	Contractual Provisions					
	Type of Rate	**Basis of Rate Determination**	**Applicable Rate Schedule**	**Basis for Rate Revision**	**Billing Practice**	**Flow Measurement for Billing (usually a +/- 8% tolerance zone is calculated to capture un-metered over- or under consumption)**
Allen Park	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges	Periodic review based on sound rate-making principles	Monthly billing (late fees apply)	Metered sewer consumption
Centerline	Contract determines capacity charges	Utility basis or cash basis	Consumption + WW strength surcharges	Periodic review based on sound rate-making principles	Monthly billing (late fees apply)	Metered sewer consumption
Clinton – Oakland District	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges	Periodic review based on sound rate-making principles	Monthly billing (late fees apply)	Metered sewer consumption
Dearborn East	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Quarterly billing (late fees apply)	Metered sewer consumption
Dearborn Northeast	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Quarterly billing (late fees apply)	Estimated consumption

Table A-3. Contract Provisions: Basis of Charges

First Tier Communities	Contractual Provisions					
	Type of Rate	**Basis of Rate Determination**	**Applicable Rate Schedule**	**Basis for Rate Revision**	**Billing Practice**	**Flow Measurement for Billing (usually a +/- 8% tolerance zone is calculated to capture unmetered over- or under consumption)**
Dearborn West	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Quarterly billing (late fees apply)	Metered sewer consumption
Evergreen - Farmington District	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Quarterly billing (late fees apply)	Metered sewer consumption
Farmington	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Quarterly billing (late fees apply)	Metered sewer consumption
Grosse Pointe	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Periodic billing (late fees apply)	Estimated consumption
Grosse Pointe Farms	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Quarterly billing (late fees apply)	Estimated consumption

Table A-3. Contract Provisions: Basis of Charges

First Tier Communities	Contractual Provisions					
	Type of Rate	Basis of Rate Determination	Applicable Rate Schedule	Basis for Rate Revision	Billing Practice	Flow Measurement for Billing (usually a +/- 8% tolerance zone is calculated to capture unmetered over- or under consumption)
Grosse Pointe Park	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Periodic billing (late fees apply)	Metered consumption
Hamtramck	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Periodic Billing (late fees apply)	Estimated consumption
Harper Woods	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Periodic Billing (late fees apply)	Estimated consumption
Highland Park	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Periodic Billing (late fees apply)	Estimated consumption
Macomb County	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Monthly Billing (late fees apply)	Metered sewer consumption

Table A-3. Contract Provisions: Basis of Charges

First Tier Communities	Contractual Provisions					
	Type of Rate	**Basis of Rate Determination**	**Applicable Rate Schedule**	**Basis for Rate Revision**	**Billing Practice**	**Flow Measurement for Billing (usually a +/- 8% tolerance zone is calculated to capture unmetered over- or under consumption)**
Melvindale	Consumption & rental charge	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Monthly Billing (late fees apply)	Metered sewer consumption
NE Wayne County	Contract distinguishes between service charges for different user types	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Quarterly billing (late fees apply)	Metered sewer consumption
Redford Township	1951 contract distinguishes between drainage and treatment charges	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Monthly Billing (late fees apply)	Estimated consumption
Rouge Valley	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Quarterly billing (late fees apply)	Metered sewer consumption

Table A-3. Contract Provisions: Basis of Charges

First Tier Communities	Contractual Provisions					
	Type of Rate	**Basis of Rate Determination**	**Applicable Rate Schedule**	**Basis for Rate Revision**	**Billing Practice**	**Flow Measurement for Billing (usually a +/- 8% tolerance zone is calculated to capture unmetered over- or under consumption)**
SE Oakland County District	Not specified	N/A	N/A	N/A	Periodic Billing (late fees apply)	Metered sewer consumption
Wayne County Area #3	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Monthly Billing (late fees apply)	Estimated consumption
Wayne County Area #6	Not specified	Utility basis or cash basis	Consumption + WW strength surcharges, potential additional charges for industrial sewage	Periodic review based on sound rate-making principles	Monthly Billing (late fees apply)	Estimated consumption

APPENDIX B

Appendix B
MWRA Policy for Admission of a New Community to the Waterworks System

Introduction

This appendix summarizes the Policy #: OP.10 issued by the Massachusetts Water Resources Authority (MWRA) on June 25, 1997. The purpose of the policy is to define the criteria that are relevant in case a new community, or wholesale water customer, applies for admission to the MWRA waterworks system. Furthermore, the policy outlines the process the MWRA uses in order to evaluate any request for admission. It is important to note that even though Policy # OP.10 outlines admissions to the waterworks system; the admission to the sewer system conceptually follows the identical pattern.

Admissions Process

In particular, the MWRA will follow the steps as outlines below in its evaluation of a new application to its water system:

Fulfillment of Admission Criteria

The MWRA has defined two groups of criteria when evaluating a new application: (1) Enabling Act criteria, and (2) other criteria. In order to meet the first set of criteria, the MWRA must in accordance with Section 8 (d) of Chapter 372 of the Acts of 1984 find that among other factors the safe yield of the watershed is not exceeded, a water management plan has been adopted, and the applicant has adopted effective demand management measures. Other criteria cover areas such as the protection of the interest of the authority's current users, the legality of the application, and fair compensation for past investment by existing user communities.

Application process

Findings required by statute

Detailed documentation of the fulfillment of all admission criteria as outlined in 1) need to be submitted together with the application to the executive office of the authority.

Additional requirements

A new applicant also needs to provide documentation on any pending applications for approval to the state or local government, or any additional environmental or hydraulic impact statements required. Furthermore, the applicant needs to submit or provide proof of the existence and content of conservation plans, any changes to local zoning ordinances, any additional reports on safe yields or related matters, as well as a detailed summary of the applicant's customer classes with updated respective account estimates for residential, commercial, and industrial users.

MWRA review of application

The MWRA will review all submitted materials and documentations by the applicant and upon preliminary approval of these documents pass on the application, including a status report thereof, to the Board of Directors.

Water Supply Agreement

If the MWRA approves the request for new service, a water supply agreement will be negotiated. Typically, the agreement has a life of ten years and will be consistent with the authority's Continuation of Contract Water Supply Regulations. In particular, the agreement will include provisions covering the limits on average and/or maximum daily flow, the exact entrance or buy-in fees to be paid by the community, the requirement to use and develop local water sources to the greatest extent possible, as well as any other contractual provisions that seem appropriate.

Waivers

The MWRA has retained the right to modify any of the above criteria and their representation within the water supply agreement based on the applicant's individual circumstances.

Entrance Fees

The entrance fee is calculated as to assure that the applicant pays its fair share of the cost of the waterworks system at the time the user joins. The buy-in charge recovers the new user's proportional share of the system's asset base, which has already been paid for by the existing users. The basic formula is as follows:

[Projected water needs/Total system consumption] * Net asset value of system

The formula is based on a five-year consumption average both for the applicant and the entire system.

Connections and Connection Costs

The applicant is responsible for all incurred connection cost. However, the applying community is only financially responsible for connection cost incurred to serve its own needs. If other existing users benefit from the new infrastructure, the MWRA will assume these costs and add them to the overall capital cost for water.