

### Historical and Projected Billed Volume Data - Sewage Disposal System

CUSTOMER	Historical Flow					Prior Year	Current Year	Prospective
	2007	2008	2009	2010	2011	Projection	Projection	Yr Projection
	Mcf	Mcf	Mcf	Mcf	Mcf	Mcf	Mcf	Mcf
<b>SUBURBAN WHOLESALE:</b>								
Allen Park	44,945	38,220	39,252	34,382	42,611	39,000	35,000	38,000
Center Line	63,770	57,160	60,825	36,128	57,072	60,000	50,000	50,000
Dearborn East	503,527	507,432	529,147	480,415	489,421	525,000	515,000	500,000
Dearborn Northeast	38,126	40,485	17,069	41,246	32,332	40,000	40,000	35,000
Dearborn West	604,100	607,632	652,945	513,399	567,934	625,000	600,000	575,000
Evergreen-Farmington	2,150,422	2,042,275	2,154,256	1,725,742	1,876,971	2,275,000	2,100,000	1,920,000
Farmington	72,612	68,050	75,344	57,180	71,072	72,000	65,000	65,000
Grosse Pointe	36,369	35,674	38,005	38,561	28,775	36,000	36,000	32,500
Grosse Pointe Farms	79,187	85,881	59,990	69,638	74,990	85,000	80,000	75,000
Grosse Pointe Park	117,517	112,129	108,704	83,776	91,839	110,000	110,000	95,000
Hamtramck	76,157	72,201	69,318	119,670	64,800	70,000	75,000	80,000
Harper Woods	6,210	6,640	5,859	5,484	5,720	6,500	6,500	6,000
Highland Park	177,542	200,762	185,565	133,898	151,053	185,000	175,000	150,000
Oakland Macomb Int Dist (a)	3,645,504	3,610,835	3,830,402	3,285,208	3,467,283	3,750,000	3,600,000	3,819,300
Melvindale	83,803	80,958	88,628	70,494	85,121	84,000	84,000	84,000
N.E. Wayne County	1,507,023	1,422,601	1,698,509	1,296,673	1,620,339	1,525,000	1,500,000	1,500,000
Redford Township	1,557	1,524	1,429	1,406	1,604	1,500	1,500	1,500
Rouge Valley	3,506,757	3,382,764	3,671,128	3,041,654	3,365,086	3,500,000	3,500,000	3,300,000
George W Kuhn Drainage Dist	2,990,713	2,883,453	3,188,621	2,404,934	2,972,975	3,025,000	3,000,000	2,800,000
Wayne County #3	198	8	199	143	286	300	300	200
Wayne County #6	3,456	3,647	581	3,336	3,230	4,000	4,000	3,250
<b>SUBTOTAL SUBURBAN</b>	<b>15,709,495</b>	<b>15,260,331</b>	<b>16,475,777</b>	<b>13,443,365</b>	<b>15,070,513</b>	<b>16,018,300</b>	<b>15,577,300</b>	<b>15,129,750</b>
<b>DETROIT RETAIL</b>	<b>4,337,580</b>	<b>3,718,008</b>	<b>3,961,629</b>	<b>3,591,825</b>	<b>3,737,887</b>	<b>3,900,000</b>	<b>3,775,000</b>	<b>3,775,000</b>
<b>TOTAL VOLUME</b>	<b>20,047,074</b>	<b>18,978,339</b>	<b>20,437,405</b>	<b>17,035,189</b>	<b>18,808,400</b>	<b>19,918,300</b>	<b>19,352,300</b>	<b>18,904,750</b>

**Units of Service Summary by Customer  
Prospective Rate Year 2012-13**

	(1)	(2)	(3)	(4)	(5)	(6)
	Allocation <u>Volume</u> Mcf	<u>BOD</u> lbs <i>(a)</i>	<u>TSS</u> lbs <i>(b)</i>	<u>PHOS</u> lbs <i>(c)</i>	<u>FOG</u> lbs <i>(d)</i>	New Wet Weather <u>Facilities</u>
<b>OUTSIDE CITY</b>						
<b><u>Billing Meter Customers</u></b>						
Allen Park	36,453	223,648	348,767	5,768	37,237	0.03%
Center Line	56,574	338,890	528,482	8,740	56,425	0.06%
Dearborn East	473,942	2,798,745	4,364,500	72,182	465,987	0.00%
Dearborn West	552,723	3,004,738	4,685,735	77,495	500,285	0.00%
Evergreen-Farmington	1,986,004	13,297,691	20,737,069	342,958	2,214,048	1.49%
Farmington	63,158	405,520	632,387	10,459	67,519	0.05%
Grosse Pointe Park	91,753	537,844	838,740	13,871	89,550	0.06%
Oakland Macomb Int Dist	3,949,594	27,945,085	43,578,932	720,727	4,652,820	2.65%
Melvindale	81,913	533,967	832,695	13,771	88,905	0.07%
N.E. Wayne County	1,447,135	8,355,796	13,030,437	215,503	1,391,229	1.17%
Rouge Valley	3,211,506	21,915,250	34,175,713	565,212	3,648,861	2.96%
George W Kuhn Drainage Dist	<u>2,723,261</u>	<u>16,720,902</u>	<u>26,075,392</u>	<u>431,246</u>	<u>2,784,008</u>	<u>2.26%</u>
<i>SUBTOTALS:</i>	<i>14,674,016</i>	<i>96,078,074</i>	<i>149,828,849</i>	<i>2,477,933</i>	<i>15,996,874</i>	<i>10.80%</i>
<b><u>System Meter Customers</u></b>						
Dearborn E. (Storm Only)	24,989	66,804	104,177	1,723	11,123	1.63%
Dearborn N.E.	101,316	441,817	688,991	11,395	73,562	0.00%
Grosse Pointe	54,295	303,903	473,921	7,838	50,599	0.23%
Grosse Pointe Farms	119,529	685,900	1,069,626	17,690	114,201	0.50%
Hamtramck	263,879	1,096,215	1,709,491	28,272	182,518	1.59%
Harper Woods	15,873	71,741	111,877	1,850	11,945	0.01%
Highland Park	372,297	1,727,987	2,694,708	44,566	287,708	2.06%
Redford Township	7,350	26,976	42,068	696	4,491	0.06%
Wayne County #3	2,474	7,592	11,839	196	1,264	0.03%
Wayne County #6	<u>7,575</u>	<u>36,125</u>	<u>56,335</u>	<u>932</u>	<u>6,015</u>	<u>0.08%</u>
<i>SUBTOTALS:</i>	<i>969,577</i>	<i>4,465,060</i>	<i>6,963,034</i>	<i>115,158</i>	<i>743,427</i>	<i>6.20%</i>
<b>SUBTOTAL SUBURBAN</b>	15,643,592	100,543,135	156,791,882	2,593,090	16,740,301	17.00%
<b>CITY OF DETROIT</b>	<u>12,517,309</u>	<u>53,748,165</u>	<u>83,817,518</u>	<u>1,386,210</u>	<u>8,948,999</u>	83.00%
<b>TOTAL ALLOCATION VOLUME</b>	28,160,902	154,291,300	240,609,400	3,979,300	25,689,300	100.00%
Industrial Monitored Customers		<u>4,398,000</u>	<u>6,157,000</u>	<u>71,000</u>	<u>1,163,000</u>	
<b>TOTAL ASSIGNED UNITS OF SER</b>	28,160,902	158,689,300	246,766,400	4,050,300	26,852,300	100.00%

*(a) Based on 130 mg/l Sanitary, 43 mg/l DWII, and 43 mg/l wet weather*

*(b) Based on 202 mg/l Sanitary, 67 mg/l DWII, and 67 mg/l wet weather*

*(c) Based on 3.3 mg/l Sanitary, 1.1 mg/l DWII, and 1.1 mg/l wet weather*

*(d) Based on 21.6 mg/l Sanitary, 7.1 mg/l DWII, and 7.1 mg/l wet weather*

**TFG**

Sewage Disposal System  
Preliminary FY 2012-13 Revenue Requirement Projections - *\$millions*

		<b>PRELIMINARY</b>		
		FY 2010-11	FY 2011-12	FY 2012-13
		<u>Actual</u>	<u>Baseline</u>	<u>Projection</u>
1	Revenues from Rates & Charges (a)	407.80	465.03	453.88
2	Revenues from Look-Back Recovery		20.00	20.00
3	Miscellaneous & Non-Operating Revenue	<u>19.48</u>	<u>16.28</u>	<u>7.19</u>
4	TOTAL AVAILABLE REVENUE	427.28	501.31	481.07
5	less: Operation & Maintenance Expense	230.81	218.38	230.32
6	NET AVAILABLE REVENUE (4)-(5)	196.47	282.93	250.75
<u>Debt Service</u>				
7	Senior Lien Bonds	113.23	110.69	129.32
8	Second Lien Bonds	59.95	63.28	56.01
9	SRF Junior Lien Bonds	<u>35.87</u>	<u>36.90</u>	<u>36.17</u>
10	Total Debt Service	209.06	210.88	221.49
11	Other Capital Revenue Requirements	<u>(12.60)</u>	<u>72.05</u>	<u>68.00</u>
12	Total Capital Revenue Requirement (10)+(11)	196.47	282.93	289.49
13	Additional Revenue Required (6)-(12)	0.00	0.00	<b>(38.74)</b>
14	Revenue Increase Required - % (13)/(1)			<b>8.5%</b>
<u>Parity Debt Service</u>				
15	Senior Lien Bonds (7)	113.23	110.69	129.32
16	Second Lien Bonds (15)+(8)	173.19	173.98	185.32
17	SRF Junior Lien Bonds (16)+(9)	209.06	210.88	221.49
<u>D/S Coverage</u>				
18	Senior Lien Bonds (12)/(15)	174%	256%	224%
19	Second Lien Bonds (12)/(16)	113%	163%	156%
20	SRF Junior Lien Bonds (12)/(17)	94%	134%	131%
<u>Income Statement Summary</u>				
21	Net Revenues (6)+(13)	196.47	282.93	289.49
22	plus: Contributions	5.52	0.10	0.10
23	less: OPEB & Other	<b>(16.44)</b>	<b>(13.00)</b>	<b>(13.33)</b>
24	less: Depreciation Expense	<b>(150.66)</b>	<b>(95.03)</b>	<b>(112.70)</b>
25	less: Interest Expense	<b>(119.74)</b>	<b>(138.78)</b>	<b>(130.11)</b>
26	less: Derivatives/Other	<b>(106.99)</b>	<u>0.00</u>	<u>0.00</u>
27	Proxy for Change in Net Assets	<b>(191.84)</b>	36.22	33.45
<i>(a) Net of Collections Allowance</i>				

Sewage Disposal System  
Preliminary FY 2012-13 Revenue Requirement Projections - \$millions  
CONVERSION OF SYSTEM REVENUE REQUIREMENT

<u>Item</u>	<u>Cash Basis</u>	<u>Utility Basis</u>
1 Operation & Maintenance Expense (a)	230.32	240.09
2 Debt Service	221.49	
3 Other Cash (Revenue Financed Capital, Reserves) Req'ts	48.00	
4 <i>Depreciation Expense</i>		112.65
5 <i>Return on Rate Base</i>		147.07
6 Total (b)	499.81	499.81
7 <i>Rate Base</i>		2,974.54
8 <i>Rate of Return</i>		4.94%
 <i><u>(a) Reconciliation of O&amp;M Expense</u></i>		
9 <i>Budgeted O&amp;M - Cash Basis</i>		230.32
10 <i>Budgeted Non-Op Expense (POC Payments)</i>		9.77
11 <i>Utility Basis Operation and Maintenance Expense</i>		240.09
 <i><u>(b) Reconciliation to Revenue Requirement from Rates</u></i>		
12 <i>Total Revenue Requirement</i>		499.81
13 <i>less: Miscellaneous and Non-Operating Revenue</i>		(7.19)
13 <i>Total Revenue Required from Rates</i>		492.62

Sewage Disposal System  
Preliminary Results of FY 2012-13 Cost Allocation to Customers

	Revenue Under Existing Rates	Allocated Revenue Requirement	Variance	% Variance
City of Detroit Retail Total (a)	201,434,515	221,449,946	20,015,431	9.9%
Suburban Wholesale (b)	228,692,115	244,080,188	15,388,073	6.7%
Industrial Specific	23,749,270	27,088,866	3,339,596	14.1%
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Total System	453,875,900	492,619,000	38,743,100	8.5%
 (a) Includes Suburban Individual (b) Detailed Suburban Wholesale				
 <b><u>Billing Meter Customers</u></b>				
Allen Park	479,524	537,911	58,387	12.2%
Center Line	778,272	826,688	48,416	6.2%
Dearborn East	6,371,396	6,664,435	293,039	4.6%
Dearborn West	7,200,364	7,408,823	208,459	2.9%
Evergreen-Farmington	28,868,208	30,780,678	1,912,470	6.6%
Farmington	882,280	956,797	74,517	8.4%
Grosse Pointe Park	1,335,402	1,311,786	(23,616)	-1.8%
OMID	61,625,676	68,364,350	6,738,674	10.9%
Melvindale	1,153,224	1,254,804	101,580	8.8%
N.E. Wayne County	19,630,668	20,599,455	968,787	4.9%
Rouge Valley	47,514,444	50,595,886	3,081,442	6.5%
George W Kuhn Drainage Dist	38,806,168	40,182,516	1,376,348	3.5%
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Subtotal	214,645,626	229,484,129	14,838,503	6.9%
 <b><u>System Meter Customers</u></b>				
Dearborn E. (Storm Only)	967,836	955,750	(12,086)	-1.2%
Dearborn N.E.	1,123,672	1,205,312	81,640	7.3%
Grosse Pointe	816,430	840,448	24,018	2.9%
Grosse Pointe Farms	1,804,332	1,874,550	70,218	3.9%
Hamtramck	3,566,480	3,764,350	197,870	5.5%
Harper Woods	180,504	197,991	17,487	9.7%
Highland Park	5,324,448	5,483,911	159,463	3.0%
Redford Township	101,430	105,692	4,262	4.2%
Wayne County #3	38,380	40,253	1,873	4.9%
Wayne County #6	122,977	127,801	4,824	3.9%
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Subtotal	14,046,489	14,596,059	549,570	3.9%

**Suburban Wholesale Customers**  
**Schedule of Comparative Sewage Unit Costs**  
*DOES NOT REPRESENT PROPOSED SEWER RATE*

<u>Customer</u>	<u>Existing</u> \$/Mcf	<u>Proposed</u> \$/Mcf	<u>Change</u> \$/Mcf	<u>% Change</u>
<b><u>Billing Meters</u></b>				
Allen Park	12.62	14.16	1.54	12.2%
Center Line	15.57	16.53	0.96	6.2%
Dearborn East	12.74	13.33	0.59	4.6%
Dearborn West	12.52	12.88	0.36	2.9%
Evergreen-Farmington	15.04	16.03	0.99	6.6%
Farmington	13.57	14.72	1.15	8.5%
Grosse Pointe Park	14.06	13.81	(0.25)	-1.8%
Melvindale	13.73	14.94	1.21	8.8%
N.E. Wayne County	13.09	13.73	0.64	4.9%
Rouge Valley	14.40	15.33	0.93	6.5%
George W Kuhn Drainage Dist	13.86	14.35	0.49	3.5%
Oakland Macomb Int. Dist.	16.14	17.90	1.76	10.9%
<i>Average Metered</i>	<i>14.56</i>	<i>15.56</i>	<i>1.00</i>	<i>6.9%</i>
<b><u>System Meters</u></b>				
Dearborn N.E.	32.10	34.44	2.34	7.3%
Grosse Pointe	25.12	25.86	0.74	2.9%
Grosse Pointe Farms	24.06	24.99	0.93	3.9%
Hamtramck	44.58	47.05	2.47	5.6%
Harper Woods	30.08	33.00	2.92	9.7%
Highland Park	35.50	36.56	1.06	3.0%
Redford Township	67.62	70.46	2.84	4.2%
Wayne County #3	191.90	201.27	9.37	4.9%
Wayne County #6	37.84	39.32	1.48	3.9%
<i>Average Unmetered</i>	<i>35.01</i>	<i>36.38</i>	<i>1.37</i>	<i>3.9%</i>

## Suburban Wholesale Customers Schedule of Fixed Monthly Charges

<u>Customer</u>	<u>Existing</u> \$/Mo.	<u>Proposed</u> \$/Mo.	<u>Change</u> \$/Mo.	<u>% Change</u>
<b><u>Billing Meters</u></b>				
Allen Park	15,577.00	17,759.00	2,182.00	14.0%
Center Line	24,731.00	29,225.00	4,494.00	18.2%
Dearborn East	209,283.00	234,609.00	25,326.00	12.1%
Dearborn West	294,322.00	313,023.00	18,701.00	6.4%
Evergreen-Farmington	698,484.00	755,422.00	56,938.00	8.2%
Farmington	24,990.00	27,516.00	2,526.00	10.1%
Grosse Pointe Park	44,546.00	48,296.00	3,750.00	8.4%
Melvindale	31,422.00	34,406.00	2,984.00	9.5%
N.E. Wayne County	689,639.00	789,119.00	99,480.00	14.4%
Rouge Valley	992,287.00	1,159,560.00	167,273.00	16.9%
George W Kuhn Drainage Dist	1,187,514.00	1,322,723.00	135,209.00	11.4%
Oakland Macomb Int. Dist.	1,418,021.00	1,608,991.00	190,970.00	13.5%
<b><u>System Meters</u></b>				
Dearborn E. (Storm Only)	80,653.00	79,646.00	(1,007.00)	-1.2%
Dearborn N.E.	63,831.00	70,324.00	6,493.00	10.2%
Grosse Pointe	37,865.00	37,748.00	(117.00)	-0.3%
Grosse Pointe Farms	80,236.00	80,585.00	349.00	0.4%
Hamtramck	231,540.00	246,247.00	14,707.00	6.4%
Harper Woods	9,867.00	11,232.00	1,365.00	13.8%
Highland Park	312,829.00	322,896.00	10,067.00	3.2%
Redford Township	7,265.00	7,617.00	352.00	4.8%
Wayne County #3	3,045.00	3,208.00	163.00	5.4%
Wayne County #6	7,342.00	7,691.00	349.00	4.8%

## Suburban Wholesale Customers Schedule of Comparative Sewage Rates - Commodity Charges

<u>Customer</u>	<u>Existing</u> \$/Mcf	<u>Proposed</u> \$/Mcf	<u>Change</u> \$/Mcf	<u>% Change</u>
<b><u>Billing Meters</u></b>				
Allen Park	7.70	8.55	0.85	11.0%
Center Line	9.63	9.52	(0.11)	-1.1%
Dearborn East	7.72	7.70	(0.02)	-0.3%
Dearborn West	6.38	6.35	(0.03)	-0.5%
Evergreen-Farmington	10.67	11.31	0.64	6.0%
Farmington	8.96	9.64	0.68	7.6%
Grosse Pointe Park	8.43	7.71	(0.72)	-8.5%
Melvindale	9.24	10.02	0.78	8.4%
N.E. Wayne County	7.57	7.42	(0.15)	-2.0%
Rouge Valley	10.79	11.12	0.33	3.1%
George W Kuhn Drainage Dist	8.77	8.68	(0.09)	-1.0%
Oakland Macomb Int. Dist.	11.68	12.84	1.16	9.9%
<i>Average Metered</i>	<i>9.94</i>	<i>10.40</i>	<i>0.46</i>	<i>4.6%</i>
<b><u>System Meters</u></b>				
Dearborn N.E.	10.22	10.33	0.11	1.1%
Grosse Pointe	11.14	11.92	0.78	7.0%
Grosse Pointe Farms	11.22	12.10	0.88	7.8%
Hamtramck	9.85	10.12	0.27	2.7%
Harper Woods	10.35	10.53	0.18	1.7%
Highland Park	10.47	10.73	0.26	2.5%
Redford Township	9.50	9.52	0.02	0.2%
Wayne County #3	9.20	8.82	(0.38)	-4.1%
Wayne County #6	10.73	10.76	0.03	0.3%
<i>Average Unmetered</i>	<i>10.53</i>	<i>10.93</i>	<i>0.40</i>	<i>3.8%</i>
Average Suburban Wholesale	9.96	10.42	0.46	4.6%