

Hamilton County Rate Affordability Task Force

May 13, 2016

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Executive Summary

Hamilton County's Rate Affordability Task Force was created to evaluate the rate structure of the Metropolitan Sewer District of Greater Cincinnati (MSD) and recommend preferred alternatives to the Board of County Commissioners for improving the affordability and equity of the current rate structure. The final product is a recommended list of alternatives for Board of County Commissioners consideration. A list of Task Force members can be found in Appendix A.

There are many challenges facing MSD, including: increasing costs due to aging infrastructure and the consent decree; slow customer growth; and a decline in water usage. MSD is not alone in these challenges; wastewater treatment systems throughout the United States are struggling with aging infrastructure and mandated improvements required under federal consent decrees.

Under the terms of a federal consent decree, MSD is required to make more than \$3 billion in infrastructure improvements to reduce wastewater overflows into local waterways. These mandated improvements are the primary cause of an average eight percent annual increase in sewer rates over the past 10 years, with the average residential sewer rate now exceeding \$210 per quarter. The most recent data demonstrates that 16,568 accounts are in delinquency status.

During the time the Task Force met, there was considerable information in the media about the operations of MSD. While the Task Force's purview was not to examine expenditures, there was consensus that the Board of County Commissioners should not increase rates until the final results of the financial audits are released as the public trust needs to be rebuilt before any increases are approved. With the understanding of the need to fix the sewer system, the Task Force also raised concerns about the cost of the Consent Decree on rate payers. To date MSD has spent approximately \$760 million on consent decree Phase 1 projects through 12/31/2014¹.

The Task Force had nine meetings between September 2015 and May 2016. The first four meetings were focused on familiarizing the members with MSD operations and the details of the current rate structure. Subsequent meetings were dedicated to identifying potential solutions and coming to consensus on the final list of alternative rate structures and programs to address affordability and equity. Meeting summaries are included in Appendix B.

Recommendations

A menu of nine recommendations was developed for consideration by the Board of County Commissioners. The recommendations should be viewed as a menu of options that could be implemented singularly while some can be implemented in combination with another. All recommendations were examined through the lens of equity and affordability. In addition, the Task Force attempted to ensure, to the extent possible, that each billing and rate option was revenue neutral. The Task Force also recognized the need to continue the practice of a base charge due to the fixed costs of the system. The final list of alternatives presented in this report is categorized into three buckets: billing and rates; inflow/infiltration; and customer assistance programs. Table 1 presents a

¹ Hamilton County 2015 Annual Information Statement

high level overview of each option. Section 2 of the report provides details of each recommendation along with their strengths and weaknesses.

Table 1: Task Force Recommendations

Option	Description
Billing and Rates	
<i>Structural Changes</i>	
Monthly billing	Move all residential customers to monthly billing.
Reduce volumetric allocation	Base the volumetric monthly allocation on 3 CCF of water usage.
Remove minimum volumetric allocation	Eliminate the current volumetric charge based on a minimum of water usage. Instead, implement a base fee plus a charge for water consumed.
<i>Equity Changes</i>	
Multi-family billing based on meter size	Change multi-family customer billing to a base charge based on meter size only (versus the greater of meter size or number of units).
Correction to meter size billing	Bill based on meter size at the house, not based on the size of meter coming from the street.
Inflow/Infiltration (Stormwater)	
Fund I/I costs through an impervious surface surcharge	Implement a surcharge based on impervious surface area (similar to City of Columbus' Clean Rivers Surcharge).
Impervious surface assessment on tax bill	Implement a surface assessment similar to the existing Hamilton County Stormwater District Assessment.
Customer Assistance Programs	
Discount Program	Provide percentage discount for eligible residents.
Emergency Funding	Provide a credit for residents that have a verifiable hardship.

Throughout the Task Force meetings, a few important issues were raised and discussed that, while not directly related to affordability and equity, are nonetheless beneficial to ratepayers and should be pursued by Hamilton County and MSD:

- Continue talks with their local congressional delegation in support of U.S. Senate Bill 2358 and, if passed, work to become one of the pilot projects.
- Raise awareness to all political jurisdictions about lateral line insurance as offered in the City of Deer Park.
- Implement a formal billing appeals process.

Next Steps

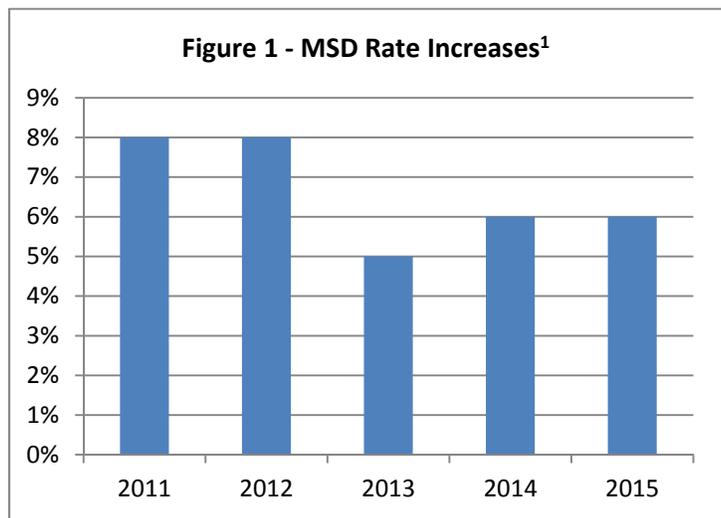
Each of the recommendations outlined require various levels of analysis prior to a decision by the Board of County Commissioners. While some of the options can be implemented in the short-term, such as monthly billing, others will require a thorough legal and technical review resulting in a longer decision-making process and implementation. Furthermore, if a combination of recommendations is deemed appropriate by the Board of County Commissioners, that combination should be examined to ensure they integrate with each other and do not cause unintended consequences for affordability or equity.

1. Introduction

The Metropolitan Sewer District of Greater Cincinnati (MSD) collects and treats industrial, commercial and residential wastewater for municipalities and unincorporated areas of Hamilton County. MSD is a large, complex organization that serves more than 225,000 residential, commercial, and industrial sewer connections; operates seven major wastewater treatment plants, two package treatment plants, 99 pump stations, and 10 major pumping stations; and oversees more than 3,000 miles of sanitary and combined sewers. In 2013, the seven major treatment plants treated 70 billion gallons of wastewater. In addition, MSD is required, under a federal consent decree, to spend more than \$3 billion on infrastructure improvements to reduce combined sewer overflows and achieve compliance with the Clean Water Act.

Adjustments to MSD sewer rates are based upon the cost of service from the customer classes served (residential, commercial, multi-family, and industrial) and overall revenue requirements. Using an independent consultant, MSD annually reviews the adequacy of its rate structure to generate sufficient revenues for its operating and capital requirements.

As outlined in Figure 1, the average rate increase from 2011 – 2015 was 6.6 percent. Future rate increases are projected to be slightly more than 5 percent per year (based on various assumptions). These increases are impacting ratepayers.



According to MSD, 16,568 active accounts are in delinquency status. Rate increases are not unique to MSD as Cleveland averaged an 11.32 percent rate increase over the same period; Columbus averaged 3 percent; Toledo averaged 3.82 percent.

The current sewer charge consists of a minimum base charge based on water meter size (except multi-family which is based upon either meter size or number of units, whichever results in the larger minimum charge) and a volumetric charge based on quantity of water used. The volumetric charge is applied to all customers who use more than 5 centum cubic feet (CCF) of water each month. If the customer is billed quarterly, the volumetric charge applies to water usage over 9 CCF. Residential customers are primarily billed quarterly with large users primarily billed monthly. The current average quarterly residential bill is \$211.41 (base charge + volumetric charge). Table 2 compares the quarterly bills in Ohio cities based on average water usage of 25 CCF per quarter.

Table 2: Comparison of Quarterly Bills²

Cincinnati	Cleveland	Columbus ³	Toledo
\$211.41	\$181.03	\$118.82	\$141.61

² As of October 21, 2015

³ Columbus rate includes the Clean Rivers Surcharge which is based upon impervious surface.

Table 3 compares MSD’s single family residential base sewer charges for the associated quarterly usage (in CCF) with other Ohio cities.

Table 3: Comparison of Quarterly Single Family Residential Sewer Charges as of 10/21/15

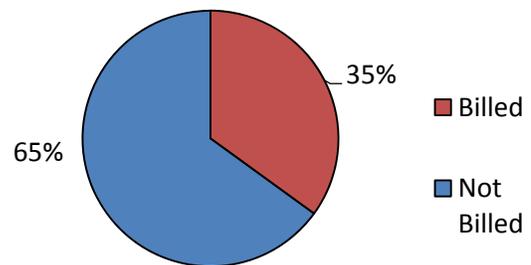
Usage (ccf/quarter)	Akron ⁴	Cincinnati	Cleveland	Columbus ⁵	Toledo
3	\$43.23	\$117.35	\$27.80	\$32.80	\$57.53
6	\$75.20	\$117.35	\$48.69	\$44.53	\$68.99
9	\$107.18	\$117.35	\$69.59	\$56.26	\$80.46
12	\$139.16	\$134.99	\$90.48	\$67.99	\$91.92
15	\$171.14	\$152.62	\$111.38	\$79.72	\$103.39
18	\$203.11	\$170.26	\$132.27	\$91.45	\$114.86
21	\$235.09	\$187.90	\$153.17	\$103.18	\$126.32
24	\$267.07	\$205.54	\$174.06	\$114.91	\$137.90
27	\$299.04	\$223.17	\$194.96	\$126.64	\$149.25
30	\$331.02	\$240.81	\$215.85	\$138.37	\$160.72

Wastewater collected and treated by MSD includes sanitary wastewater flow, industrial and commercial wastewater, and infiltration/inflow (I/I) of groundwater and stormwater runoff into the sewers. The terms “inflow” and “infiltration” (I/I) are used to describe the ways that groundwater and stormwater enter the sanitary sewer system. Inflow is water that enters the system through connections other than sanitary connections or laterals, such as downspouts, driveway drains, etc. Infiltration is groundwater that enters the system through leaks in the pipe. I/I is referred to as “clear water” to distinguish it from sanitary sewage.

MSD treats a significantly larger volume of water than the volume it bills. Table 4 provides a five year historical summary showing the difference between these two amounts. The difference is caused by I/I. According to the 2015 MSD Rate Study, the amount of I/I seen in 2015 is somewhat higher than the 5 year average and that typically it represents 65 percent of the total wastewater flow reaching the treatment plants (see Figure 2). This means, in 2015, 65 percent of the flow treated by MSD was “clear water” not wastewater, at an estimated cost of \$121,416,367.

Because this cost is not caused directly by users of the system, the cost of treating this I/I must be recovered indirectly from all customers. The major cost responsibility for I/I is allocated based on an individual connection basis. Therefore, 75 percent of I/I volume is

Figure 2: Total Treated Wastewater Flow



⁴ Akron only bills on a monthly basis. These are the monthly charges multiplied by three. Akron’s consent decree started more recently than MSD’s consent decree. Akron’s rate increases have averaged 23 percent increase (2011-2015).

⁵ Columbus rate includes the Clean Rivers Surcharge which is based upon impervious surface.

allocated to customer classes based on estimated equivalent units with the remaining 25 percent allocated on the basis of attributable volume. Table 5 details the cost allocations.

Table 4: MSD Treatment Flow (2010 – 2014)

Year	Total Treatment Flow (MGD)	Total Treatment Flow (CCF)	Billable Wastewater Flow (CCF)	Total Flow Treated but Not Billed	Percentage of Flow Treated but Not Billed
2010	58,746	78,537,433	34,444,304	44,093,129	56.14%
2011	73,008	97,604,278	33,504,893	64,099,385	65.67%
2012	54,785	73,241,979	32,542,971	40,699,008	55.57%
2013	70,149	93,782,086	34,799,087	58,982,999	62.89%
2014	61,118	81,708,556	34,709,453	46,999,103	57.52%

Table 5: Inflow and Infiltration Costs

Allocation	Average Rate (2010 – 2014)	2015 Rate Study Average of 65%
Equivalent Connections (base charges)	\$83,440,363	\$91,062,275
Base Charge per Month	\$20.96	\$22.87
Volumetric Charges	\$27,813,454	\$30,354,092
Volumetric Charge per CCF	\$0.92	\$1.00
Total I/I Costs	\$111,253,817	\$121,416,367

2. Alternatives to Address Rate Affordability and Equity

Based on information presented during the initial meetings, the Task Force developed nine options for improving rate affordability and equity. Appendix C outlines alternatives that were reviewed but no consensus reached and, therefore, not included in the recommendations listed below. The recommendations should be viewed as a menu of options that could be implemented singularly while some can be implemented in combination with another.

2.1 Monthly Billing

There was strong consensus by the Task Force to move from quarterly to monthly billing for all customers. Under the current system, most residential customers are charged quarterly while larger users are billed monthly. Changing residential billing from quarterly to monthly can have a significant impact on affordability because customers often find it easier to budget for and pay bills that arrive at the same time each month as it becomes a routine part of a household budget, rather than a large bill that arrives every three months⁶.

Converting to monthly billing can increase billing costs; therefore, the Task Force encourages more promotion of electronic billing as a means of reducing these costs. Furthermore, all water meters need to be read monthly, if that is not already happening. Prior to implementing this recommendation, there should be in-depth conversations with Greater Cincinnati Water Works to better understand any additional needs or concerns as they are the billing agent and it would seem natural that the water billing would move to monthly at the same time.

This recommendation can be implemented in conjunction with either of the options detailed in sections 2.2 or 2.3.

Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ Monthly billing aligns with how most homeowners budget. ▪ Could decrease the delinquency rates. ▪ Ability for customers to identify and repair leaks in their system more quickly. ▪ Relatively short implementation timeline. 	<ul style="list-style-type: none"> ▪ Cost of mailing monthly versus quarterly bills; however, this can be overcome by encouraging more electronic billing.

2.2 Replace Minimum Volumetric Allocation with Base Charge

As previously outlined, MSD currently charges a minimum charge based on meter size and a volumetric allocation based on water usage. This recommendation would replace the minimum volumetric allocation with a base charge and convert to monthly billing. Table 6 outlines the impact of this recommendation (revenue neutral). There was consensus amongst the Task Force that there is a continued need for a base charge because of the fixed costs associated with the system before any customer sends water into the system. Furthermore,

⁶ Thinking Outside the Bill: A Utility Manager’s Guide to Assisting Low-Income Water Customers, A study sponsored by the American Water Works Association (AWWA) Water Utility Council, November 2004, p. 22; and Water affordability and alternatives to service disconnection, Journal, AWWA, October 1994, p. 65.

rating agencies look for utilities to increase the percentage of revenue from fixed charges to reduce revenue volatility.

If the Board of County Commissioners pursues this option, the Task Force recommends implementing it in phases due to the impact on rates to different users of the system. A phased-in approach is recommended to eliminate the significant variations for customers that use between 3 CCF and 5 CCF per month. This type of approach should be intentionally designed to smooth out the increases to the 5/8" meter size users using 3 CCF and 5 CCF and all other meter size users.

Table 6: Remove Minimum Volumetric Allocation⁷

Meter Size	Usage (CCF)	Existing Bill ⁸	Proposed Structure Increase/Decrease	Proposed Structure Increase/Decrease
5/8"	0	\$39.12	(\$14.84)	(37.95%)
5/8"	1	\$39.12	(\$8.83)	(22.56%)
5/8"	2	\$39.12	(\$2.81)	(7.19%)
5/8"	3	\$39.12	\$3.20	8.19%
5/8"	4	\$45.00	\$3.03	6.74%
5/8"	5	\$50.87	\$2.86	5.62%
5/8"	7	\$60.67	\$2.57	4.24%
5/8"	8	\$70.47	\$2.29	3.24%
¾"	10	\$91.59	\$2.00	2.18%
¾"	17	\$130.79	\$0.85	0.65%
1"	25	\$198.48	(\$0.58)	(0.29%)
1"	33	\$247.48	(\$2.01)	(0.81%)
1 ½"	50	\$393.82	(\$4.88)	(1.24%)
2"	67	\$521.11	(\$4.88)	(0.94 %)
2"	100	\$677.81	(\$4.88)	(0.72%)
3"	167	\$1,251.93	(\$4.88)	(0.39%)
3"	333	\$2,035.43	(\$4.88)	(0.24%)
4"	1,667	\$8,583.70	(\$4.88)	(0.06%)
6"	3,333	\$17,090.99	(\$4.88)	(0.03%)
8"	6,667	\$33,466.86	(\$4.88)	(0.01%)
10"	6,667	\$34,168.18	(\$4.88)	(0.01%)
12"	6,667	\$34,599.01	(\$4.88)	(0.01%)

⁷ 2015 MSD Rate Study Option 3. Adjusted by PFM to reflect monthly billing, no 2016 rate increase.

⁸ The existing bill is the quarterly bill divided by three (which assumes 3 CCF allocation) not the existing monthly 5 CCF allocation.

Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ Encourages water conservation as financial benefits are realized for residents that consume less than 3 CCF of water each month. ▪ Significant financial benefits to those that use less than 3 CCF of water per month (approximately 30 percent of residential customers use less than 9 CCF per quarter) ▪ Revenue neutral 	<ul style="list-style-type: none"> ▪ Customers that use between 3 CCF –5 CCF per month will see an increase of 5.62 percent – 8.19 percent.

2.3 Base Volumetric Charge on 3 CCF of Water Usage

If the Board of County Commissioners has concerns with eliminating the minimum volumetric allocation as outlined in the previous option, an alternative is to apply the volumetric charge to water usage of more than 3 CCF per month. The current volumetric charge is applied to all customers who use more than 5 CCF of water per month, whereas the volumetric charge for quarterly customers is applied to water usage over 9 CCF (or 3 CCF per month). In other words, those residential customers that currently receive a monthly bill are charged based upon a higher volumetric allocation than those that are billed quarterly. The Task Force attempted to understand the rationale for the different volumetric charges that has been in place for decades. MSD reviewed its records but was unable to locate any documentation as to how the differing volume allocations were determined.

Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ 30 percent of residential customers use less than 9 CCF per quarter. ▪ Ability for customers to identify and repair leaks in their system more quickly. ▪ Relatively short implementation timeline. 	<ul style="list-style-type: none"> ▪ A slight increase in rates is needed to ensure total revenue remains neutral.

2.4 Multi-Family Charged Based on Meter Size Only

Under the existing structure, multi-family customers are charged at the greater of meter size or number of family units. Changing the billing structure to meter size only would result in a loss of approximately \$3.7 million in revenue that would need to be captured by increasing the minimum charges.⁹ Table 7 details the impact of this change. The costs outlined are revenue neutral as the \$3.7 million loss is accounted for in the new rates.

Relief would be provided to certain multi-family customers that are currently billed based on the number of family units instead of meter size. For example, a multi-family property with 51 units that has a 3” meter would pay \$3,363.24 less per year, providing a savings of \$65.95 per unit. A multi-family property with 21 units that has a 2” meter would pay \$3,128.64 less per year providing a savings of \$148.98 per unit.

⁹ Metropolitan Sewer District of Greater Cincinnati.

Table 7: Multi-Family Billing by Meter Size, Monthly Billing¹⁰

Meter Size	Usage (CCF)	Existing Bill	Proposed Structure Increase	Proposed Structure Increase
5/8"	0	\$39.12	\$1.16	2.96%
5/8"	1	\$39.12	\$1.16	2.96%
5/8"	2	\$39.12	\$1.16	2.96%
5/8"	3	\$39.12	\$1.16	2.96%
5/8"	4	\$45.00	\$1.16	2.57%
5/8"	5	\$50.87	\$1.16	2.27%
5/8"	7	\$60.67	\$1.16	1.91%
5/8"	8	\$70.47	\$1.16	1.64%
3/4"	10	\$91.59	\$1.49	1.63%
3/4"	17	\$130.79	\$1.49	1.14%
1"	25	\$198.48	\$2.05	1.03%
1"	33	\$247.48	\$2.05	0.83%
1 1/2"	50	\$393.82	\$3.48	0.88%
2"	67	\$521.11	\$4.92	0.94%
2"	100	\$677.81	\$4.92	0.73%
3"	167	\$1,251.93	\$12.63	1.01%
3"	333	\$2,053.43	\$12.63	0.62%
4"	1,667	\$8,583.70	\$20.92	0.24%
6"	3,333	\$17,090.99	\$40.81	0.24%
8"	6,667	\$33,466.86	\$61.68	0.18%
10"	6,667	\$34,168.18	\$82.42	0.24%
12"	6,667	\$34,599.01	\$95.17	0.28%

Strengths

- Focuses on equity as this option is consistent with how all other customers are billed.
- Some multi-family customers would have a reduction in their bills (where the tenant is directly billed for water and sewer, or if the landlord reduces rent as a result of lower utility bills).

Weaknesses

- All customers except multi-family customers currently being charged on the unit basis have an increase in their bills.

2.5 Correction to Meter Size Billing

During the seventh Task Force meeting, discussion centered around certain properties that require a 1" pipe in order to provide adequate pressure, but the pipe at the property is 5/8". Currently, the customers in these situations are billed on the 1" pipe. The current base charge for a 1" pipe is \$69.15 per month versus \$39.12 per month for a 5/8" pipe. The Task Force recommends changing how MSD determines meter size by basing it on the size of the meter at the house. While this is estimated to only impact 3,000 households, it is directly tied to equity.

¹⁰ 2015 MSD Rate Study Option 4 – Adjusted by PFM to reflect monthly billing, no 2016 rate increase.

Strengths

- Equity
- An estimated 3,000 customers would have a reduction in their bill of approximately \$30 per month.

Weaknesses

- A reduction in revenue of approximately \$1 million will need to be accounted for in the rate structure for this option to be revenue neutral.

2.6 Inflow and Infiltration

As stated in the Introduction, according to the 2015 MSD Rate Study, 65 percent of the flow treated by MSD is “clear water” not waste water with an estimated cost of \$121,416,367. When the consent decree work is complete, theoretically, sewer rates should go down because of decreased I/I. However, in the meantime, there is a need to fund the consent decree to be in compliance with the Clean Water Act. Furthermore, not all contributors of I/I are paying into MSD which, as outlined above, is a significant cost.

The Task Force is recommending the Board of County Commissioners consider one of the following two variations to address I/I:

- Implement impervious surface surcharge (similar to Columbus’ Clean Rivers surcharge), or
- Enact an impervious surface assessment on tax bill

If acted upon, either of these options would result in a new revenue stream for MSD. While this may seem counter to the Task Force mission, it addresses affordability and equity as these options would capture areas contributing to I/I yet not billed according to contributed flow (such as parking lots with no sewers) under the current rate structure. Under either option, the rate structure would be changed to remove the I/I costs. I/I costs would instead be calculated and applied via a surcharge or assessment.

The amount of revenue recovered through these options is estimated to be \$111,253,817 - \$121,416,367, which is the cost to treat I/I (see Table 3). The impact to various customers would be dependent on the actual impervious charge and amount of impervious area for each customer.

With each of the options listed below, the Task Force recommends the Hamilton County Stormwater District place a stronger focus on stormwater quantity in addition to their current focus on stormwater quality. The options outlined will require further technical review and analyses to develop the appropriate surcharge or assessment. If either of these options is pursued, a formal billing appeals process must be implemented. Furthermore, if implemented, either option could be coupled with an incentive program for additional removal of I/I to offset site specific improvements.

2.6.1 Implement Impervious Surface Fee

To address the aforementioned I/I issues, the Task Force recommends further examination of an impervious surface fee similar to the City of Columbus. In 2006, the City of Columbus enacted its Clean Rivers Surcharge to support its \$2.5 billion capital improvement program. The Clean Rivers Surcharge is a separate charge that appears on the sewer bill. The surcharge is based on the size of impervious surface area for each property. Each property is assigned a number of “equivalent residential units.” The surcharge is equal to \$3.22 per month multiplied by the number of equivalent residential units to arrive at each property’s fee

(\$3.22/month/2,000 square feet of impervious surface). Further analysis will be necessary to determine an appropriate charge for MSD customers.

Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ Provides incentives for property owners to reduce stormwater through improvements to impervious surfaces. ▪ Focuses on rate equity as those that are contributing to part of the I/I issue are paying for the treatment costs. 	<ul style="list-style-type: none"> ▪ Requires marrying Hamilton County Stormwater District data with Stormwater Utility data. ▪ Requires further technical and legal study, therefore, a longer term solution to affordability and equity. ▪ Billing system would need to be adjusted to provide for this additional charge.

2.6.2 Implement Impervious Surface Assessment on Property Tax Bill

The Task Force recommends further examination of an impervious surface assessment on property tax bills, similar to the existing Hamilton County Stormwater District Assessment. This option has a similar intent to the surcharge outlined in Section 2.6.1. The difference between the two options is that a surface assessment would require unsewered areas of Hamilton County that contribute stormwater to MSD’s system to begin paying for the treatment costs, such as property owners that do not receive an MSD bill but contribute stormwater to the combined sewers (e.g., septic tank systems, parking lots, etc.).

Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ Provides incentives for property owners to reduce stormwater through improvements to impervious surfaces. ▪ Focuses on rate equity as those that are contributing to part of the I/I issue are paying for the treatment costs. Ensures that unsewered properties that contribute stormwater to MSD system are included in paying for the treatment costs and ultimate solution. 	<ul style="list-style-type: none"> ▪ Requires marrying Hamilton County Stormwater District data with Stormwater Utility data. ▪ Requires further study, therefore, a longer term solution to affordability and equity. ▪ New fee for those that are not connected to MSD.

2.7 Customer Assistance Program

Many utilities throughout the U.S. provide programs to assist low income residents with their utility bills. Of the five most populous cities in Ohio, Cincinnati is the only one without an affordability program, yet 16,568 accounts are in delinquent status¹¹. Therefore, the Task Force recommends implementation of a customer assistance program, similar to programs in Akron, Columbus, Cleveland, and Toledo. Two program options that have support of the Task Force include emergency assistance funding and a low income discount program. To be eligible for either program, a resident that pays their own sewer bill must be enrolled in a qualifying low income program (HEAP, food stamp benefits, etc.) or demonstrate income below 175% of federal poverty level. Either program could be administered by the Cincinnati-Hamilton County Community Action Agency and would require strong collaboration with Greater Cincinnati Water Works to ensure the appropriate billing mechanisms are in place to provide customer credits/discounts.

¹¹ Type of account in delinquent status is unknown (residential, commercial, industrial).

- Emergency Assistance Funding – This option would provide a credit to avoid shut-off for residents that have a verifiable financial hardship (e.g., job loss, major medical expenses, change in marital status). If this option is pursued, guidelines must be set on how often the credit is available to a homeowner (e.g., annually, bi-annually).
- Discount Program – This option would provide a percentage discount on sewer usage charges to residents that are already enrolled in a qualifying low income program or demonstrate income below 175% of federal poverty level.

While the Task Force did not fully examine the costs to implement either of the customer assistance programs described, one option to offset some of the program costs is to develop a voluntary donation program where existing customers can donate towards these programs through their MSD bill. However, it should be understood that this most likely will not generate enough revenue to provide a viable offset.

Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ Provides immediate relief to low income homeowners. ▪ Similar programs exist throughout Ohio and U.S. ▪ Uses an existing system (Community Action Agency) to evaluate and enroll customers. 	<ul style="list-style-type: none"> ▪ Requires further study on potential costs and details of program logistics. ▪ All customers not receiving a discount will see an increase in their sewer bills (in an amount not yet determined) to fund program. ▪ Uncertain as to how many voluntary donations will be made to help fund customer assistance program. ▪ Unanswered question if sewer portion of bill is paid, but not water, will the water be shut off? ▪ Adjustments to billing to allow for voluntary donations.

2.8 Other Discoveries

Throughout the Task Force meetings, issues not directly related to affordability and equity were discussed. However, the Task Force felt strongly that these recommendations should be included in the report and considered by the Board of County Commissioners.

MSD Financial Audit

During the time the Task Force met, there was significant media attention surrounding MSD and Hamilton County. Of particular note was the February 3, 2016 article on MSD spending in [The Cincinnati Enquirer](#). As a result of the article, the State Auditor will conduct an audit of MSD. The Task Force felt strongly that the Board of County Commissioners should not implement any rate increase until the audit findings are released and, if necessary, the issues are corrected.

Senate Bill 2358¹²

On December 3, 2015, U.S. Senate Bill 2358 was introduced that directs the U.S. EPA to carry out a pilot program to work with municipalities that are seeking to develop and implement integrated plans to meet wastewater and stormwater obligations under the Federal Water Pollution Control Act, and for other purposes. The Task Force was briefed on the legislation and agreed that Hamilton County and MSD should continue talks with their local congressional delegation in support of this bill and, if passed, work to become one of the pilot projects.

¹² Sierra Club, Ohio Chapter, Miami Group and Communities United for Action are not in support of Senate Bill 2358.

Lateral Line Insurance

The Task Force briefly discussed lateral line insurance as an option to address affordability. If problems occur, property owners are responsible for repairs or replacement to the lateral line from the building to the right of way line at an estimated cost of \$3,000 - \$5,000. Lateral line insurance helps offset the cost of these types of repairs. While not directly related to ongoing affordability of sewer rates, this type of insurance can help customers with one-time capital costs. The Task Force recommends raising awareness about lateral line insurance as is offered in the City of Deer Park and encouraging municipalities to adopt similar programs.

Billing Appeals Process

During the April meeting, the Task Force discussed examples that demonstrated the need for a formal billing appeals process (e.g., customers have been charged for the wrong meter size or family unit size). Therefore, the Task Force recommends MSD set up a formal billing appeals process.

Appendix A – Task Force Members

Name (Last, First)	Title	Organization
Moeller, Thomas	City Manager (Task Force Chair)	City of Madeira
Beck, Clark	Board of Directors	Communities United for Action
Bernloehr, John	President	Consolidated Metal Products (Representative Cincy USA Regional Chamber of Commerce)
Burke, Suzanne	CEO	Council on Aging of Southwestern Ohio
Crane, Lucy	Director, Community Impact	United Way of Greater Cincinnati
Kammer, Nancy	President/CEO	Greater Cincinnati Building Owners and Managers Association
Lawson, Mark	Managing Attorney, Consumer Law	Legal Aid Society of Southwest Ohio
Miles, Robert	Board of Directors	Communities United for Action
Morgan, Noel	Senior Attorney	Legal Aid Society of Southwest Ohio
Norman, Charles	Elections Administrator	Hamilton County Board of Elections
Pappas, Andrew	Township Trustee	Hamilton County Township Association
Quarry, Mark	Director of Government Affairs	Cincinnati Area Board of Realtors
Robinson-Benning, Gwen	President/CEO	Cincinnati-Hamilton County Community Action Agency
Russell, Christine	Economic Development Director	City of Springdale
Tassel, Charles	Director of Government Affairs	Greater Cincinnati -Northern Kentucky Apartment Association
Vonderhaar, Stiney	Executive Director	Hamilton County Municipal League
Wall, Marilyn	Chair	Sierra Club, Ohio Chapter, Miami Group

Appendix B - Meeting Summaries

The Task Force had nine meetings between September 2015 and May 2016. The first four meetings were focused on familiarizing the members with MSD operations and current rate structure. Subsequent meetings were dedicated to identifying potential solutions, prioritizing potential solutions, and coming to consensus on alternatives.

Meeting One

The first meeting of the Task Force was held on September 23, 2015. Tom Moeller, Task Force chairperson, outlined the purpose, duties, process, and rules of the Task Force. Commissioners Monzel and Portune attended the meetings at separate times to welcome the Task Force.

David Anderson, Director of Public Financial Management, provided an overview of MSD including its history, locations served, revenue, cost, and the consent decree. The meeting concluded with a list of additional information requested by the Task Force.

Meeting Two

The second meeting of the Task Force was held on October 21, 2015. Chairperson Moeller presented a brief introduction and reminder of the purpose. Requested information from the previous meeting was reviewed by David Anderson. David Anderson provided a brief introduction to the rate structure in Hamilton County compared to the structures in Akron, Cleveland, Columbus, and Toledo. Following this brief introduction, Pam Lemoine, Principal at Black & Veatch, discussed the rate structure for MSD in detail. Following a question and answer session, Steve Johns, Planning Services Administrator with Hamilton County Planning + Development, led a facilitated discussion on the topics and ideas and any concerns of the Task Force.

Meeting Three

The third meeting of the Task Force was held on November 18, 2015. The requested information from last meeting was discussed by David Anderson, and Karen Ball, Hamilton County MSD Compliance Coordinator. Charles Tassel, representing the Greater Cincinnati Northern Kentucky Apartment Owners Association, explained the use of "Submeters and Ratio Utility Billing" systems by association members as a way to structure collection of the utility fees. During this discussion, Mr. Tassel noted a reduction in water usage of about 20-25% and 10-15% resulted from implementing submeters and RUB systems, respectively.

David Anderson provided the task force with a review on the rate structure in Hamilton County compared to the structures in Akron, Cleveland, Columbus, and Toledo. Following this review, a group discussion was facilitated by Steve Johns. Mr. Anderson provided an overview of customer assistance initiatives in Akron, Cleveland, Columbus, and Toledo. These programs are designed to assist homeowners struggling with sewer bills. After the overview, the facilitated group discussion continued. The Task Force suggested and discussed many ideas and options for rate affordability, including the initial ranking, outlined in the following table.

Initial Concepts and Ranking to Address Affordability

Concept	Ranking (number of votes)
Eliminate discrepancy between monthly and quarterly billing	14
Quarterly users can pay by month	14
Charge more per ccf for high users by class to incentivize conservation	10
Implement affordability programs like line insurance, HEAP, voluntary contributions	10
Pay for what is used	9
Use stormwater fee to offset costs related to stormwater and to incentivize best management practices	8
Obtain more federal money for consent decree and affordability programs	3
Automated billing	3
Significant base fee – like Duke Energy natural gas charge	1
Create efficiency programs	1
Use other revenue sources, such as plastic bag fee, sales tax	0
Vary rates by waste water treatment plant shed	0
Resolve differences in meter charges	0

Meeting Four

The fourth meeting was held on December 2, 2015. To begin the meeting, Tom Moeller offered a quick welcome. David Anderson reviewed the requested information from last meeting. Following this discussion, MaryLynn Lodor, Deputy Director of Metropolitan Sewer District, presented details about inflow and infiltration. Following this presentation, a group discussion was facilitated by Steve Johns. During the group discussion, the task force members deliberated different rate affordability ideas and requested additional information to aid in their discussion for the next meeting.

Meeting Five

The fifth meeting was held on January 27, 2016. To begin the meeting, Tom Moeller reminded the task force of its timeline for a list of recommendations. Todd Long, Engineer at the Hamilton County Administration, provided an overview of the Hamilton County Stormwater District. During this overview, Mr. Long discussed how stormwater is charged based on impervious surface and potential future rate increases to address storm water. Following this overview, Steve Johns facilitated a group discussion. Since a time gap existed between this meeting and the last, Steve Johns led the group through a refresher of previous meetings. After this facilitated group discussion, requested information from previous meetings was addressed by David Anderson, Pam Lemoine, and MaryLynn Lodor. Following the requested information, a short group discussion was facilitated by Steve Johns to deliberate different rate affordability ideas.

Meeting Six

The sixth meeting was held on February 17, 2016. To begin the meeting, Tom Moeller offered a quick welcome including a reminder regarding the task at hand. Next, a group discussion was facilitated by Steve Johns. The group discussed its initial list of potential recommendations for improving affordability and equity of the current rate structure.

Meeting Seven

The seventh meeting was held on March 23, 2016. A group discussion was facilitated by Steve Johns and David Anderson. The current list of ideas to improve affordability was deliberated. A review of the final report outline was also discussed.

Meeting Eight

The eighth meeting was held on April 20, 2016. To begin, Tom Moeller offered a quick welcoming including a timeline for the report. For the remainder of the meeting, a group discussion was facilitated by Steve Johns. During this discussion, the timing, impact, implementation ease, prioritization, language, and overall equity for each recommendation was discussed. Furthermore, all previously agreed upon recommendations were confirmed. Also, the Task Force agreed to include the development of a formal billing appeals process.

Meeting Nine

The ninth meeting was held on May 11, 2016. Tom Moeller presented the agenda for the meeting. For the remainder of the meeting, a group discussion was facilitated by Steve Johns. During this discussion, recommendations were finalized and any doubts were deliberated. Furthermore, all issues regarding the final report were clarified.

Appendix C – Ideas Discussed but No Consensus Reached

1. Property tax

Initiate the process for a property tax targeted to the costs of the consent decree. A property tax would provide for an additional source of revenue. The Task Force did not believe a property tax increase would receive the appropriate level of support.

2. Volume only charge

The rate structure would be based on volume only (no base charge). There was consensus amongst the Task Force that there is a continued need for a base charge because of the fixed costs associated with the system before any customer sends water into the system. While this could help reduce bills for smaller households, it would result in revenue instability for MSD and, therefore, raise significant concern from the rating agencies.

3. Single volume charge

If MSD were to implement a single volume charge for all classes regardless of volume, the results would be a volume charge equal to \$5.361 per CCF in order to be revenue neutral. While this would reduce bills for many residential customers, large volume customers would have an increase¹³. There was concern raised by some Task Force members that this could negatively impact economic development.

4. Reallocation of I/I charges amongst existing user classes

Seventy-five percent of I/I charges is included in the minimum charge and is on residential equivalent units (REUs). Since residential customers account for the largest numbers of REUs, residential customers pay for a majority of the I/I cost. This option would reallocate the I/I costs so that a larger share would be paid by other rate classes. There was no specific rationale or methodology for how this reallocation would occur.

¹³ Metropolitan Sewer District of Greater Cincinnati

Appendix D – Impact on Users for Recommendations 2.2 and 2.4¹⁴

Multi-Family Billing by Meter Size		
Minimum Monthly Charge		
Meter Size	Family Units	Rate*
5/8"	n.a.	\$40.27
3/4"	n.a.	\$51.93
1"	n.a.	\$71.19
1 1/2"	n.a.	\$120.98
2"	n.a.	\$171.37
3"	n.a.	\$439.80
4"	n.a.	\$728.36
6"	n.a.	\$1,438.53
8"	n.a.	\$2,113.94
10"		\$2,869.34
12"		\$3,312.91

* Includes Volumetric Allocation of 3CCF/Month

Remove Minimum Volumetric Allocation		
Minimum Monthly Charge		
Meter Size	Family Units	Rate
5/8"	1	\$24.27
3/4"	2-3	\$35.59
1"	4-5	\$54.30
1 1/2"	6-12	\$102.66
2"	13-20	\$151.60
3"	21-50	\$412.32
4"	51-115	\$692.59
6"	116-250	\$1,382.88
8"	Over 250	\$2,070.75
10"		\$2,772.07
12"		\$3,202.90

¹⁴ Estimated from MSD 2015 Rate Report – 2016 rate increases not included.

No Minimum Volume + Multi-Family Billing Minimum Monthly Charge		
Meter Size	Family Units	Rate
5/8"	n.a.	\$25.43
3/4"	n.a.	\$37.09
1"	n.a.	\$56.35
1 1/2"	n.a.	\$106.14
2"	n.a.	\$156.52
3"	n.a.	\$424.95
4"	n.a.	\$713.51
6"	n.a.	\$1,423.69
8"	n.a.	\$2,132.43
10"		\$2,854.50
12"		\$3,298.07