ITEM 11J

MUSCATINE

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WATER POLLUTION CONTROL

MEMORANDUM

To: Gregg Mandsager, City Administrator

Cc: Nancy Lueck, Finance Director

From: Jon Koch, Director WPCP

Date: August 8th, 2013

Re: Resolution adjusting sewer and collection/drainage rates

INTRODUCTION: A review of the Sewer Rate Study-2013 was done on August 1st by the study writer Bob Veenstra of Veenstra and Kimm Engineering. This rate study was designed to determine revenue needs compared to projected costs of the Collection and Drainage Fund, the Water Pollution Control Reserve Fund and Water Pollution Control Operations Fund. The study concluded that incremental increases in rates over the next 5 years will be necessary to maintain acceptable funding levels in the three funds studied. It is now time for Council to consider the implementation of the Sewer Rate Study-2013 recommendations.

BACKGROUND: Since the City enacted the current rate structure approximately 10 years ago, the City Council has tried to avoid large rate increases. The City Council has focused on implementing smaller rate increases on an annual basis. City staff directed that the study be conducted with the same focus to minimize the impact on the rate payer. By forecasting what large capital expenses were expected over the next 10 years, city staff and Bob Veenstra used computer modeling to determine if current revenue levels would maintain acceptable funding levels in these funds. The study concluded that within 5 years the Water Pollution Control Operations fund would experience a negative balance if the current rates would be maintained. The rate study recommendations include 3% annual increases in the sewer rates and 2% annual increases in the collection and drainage rate.

RECOMMENDATION/RATIONALE: The Muscatine Water Pollution Control Plant is one of the most efficient plants in the area and continues to be a superior value to its customers. With one of the lowest rate structures compared to other communities in the state, it continues to exceed expectations at minimal expense. City staff recommends passage of the attached resolution adjusting rates as stated to maintain acceptable funding levels in the three stated funds.

BACKUP INFORMATION: See attached resolution.

RESOLUTION NO. _____

A RESOLUTION ADJUSTING UNIT RATES FOUND IN TITLE 4, CHAPTER 5 SECTIONS 4 AND 5 OF THE CITY CODE OF MUSCATINE, IOWA

WHEREAS, the City Council for the City of Muscatine, Iowa, has established a monthly fee for collection, expenses incurred in the collection and conveyance of wastewater through the collection and drainage system; and

WHEREAS, the City of Muscatine, Iowa, has established a sewage rate component for the treatment of wastewater; and

WHEREAS, it is necessary for the City of Muscatine to periodically adjust the unit rates contained in Title 4, Chapter 5, Sections 4 and 5.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF MUSCATINE, IOWA, to adjust the rates contained in Title 4, Chapter 5, Sections 4 and 5 as follows:

1. Adjust the Collection and Drainage component contained in Title 4, Chapter 5, Section 4 as follows:
   A. From September 1, 2013 through June 30, 2014, $11.20 per bill
   B. From July 1, 2014 through June 30, 2015, $11.45 per bill
   C. From July 1, 2015 through June 30, 2016, $11.70 per bill
   D. From July 1, 2016 through June 30, 2017, $11.90 per bill
   E. From July 1, 2017 through June 30, 2018, $12.15 per bill

2. Adjust the sewage rate component contained in Title 4, Chapter 5, Section 5 as follows:
   A. From September 1, 2013 through June 30, 2014:
      (a) Customer charge, $7.06 per bill
      (b) Volume, $2.42 per 100 cubic feet

   B. From July 1, 2014 through June 30, 2015:
      (a) Customer charge, $7.27 per bill
      (b) Volume, $2.49 per 100 cubic feet

   C. From July 1, 2015 through June 30, 2016:
      (a) Customer charge, $7.49 per bill
      (b) Volume, $2.57 per 100 cubic feet

   D. From July 1, 2016 through June 30, 2017:
      (a) Customer charge, $7.71 per bill
      (b) Volume, $2.64 per 100 cubic feet

E. From July 1, 2017 through June 30, 2018:
   (a) Customer charge, $7.94 per bill
   (b) Volume, $2.72 per 100 cubic feet

F. Minimum monthly charge for sewer service:
   (a) September 1, 2013 through June 30, 2014, $14.32
   (b) July 1, 2014 through June 30, 2015, $14.74
   (c) July 1, 2015 through June 30, 2016, $15.20
   (d) July 1, 2016 through June 30, 2017, $15.63
   (e) July 1, 2017 through June 30, 2018, $16.10

PASSED, APPROVED, AND ADOPTED by the City Council for the City of Muscatine, Iowa, on this, the 15th of August 2013.

_____
DeWayne Hopkins, Mayor

ATTEST:

_____
Gregg Mandsager, City Clerk

MUSCATINE

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WATER POLLUTION CONTROL

MEMORANDUM

To: Gregg Mandsager, City Administrator

CC: Nancy Lueck, Finance Director

From: Jon Koch, Director WPCP

Date: July 28th, 2013

Re: Review of Sewer Rate Study-2013

INTRODUCTION: Rates are set for sewer use according to anticipated future needs and capital expenses at the Water Pollution Control Plant, the collection and drainage system, 21 lift stations and the stormwater infrastructure. Rate studies use rate analysis reviews to ensure reliable funding of the sewer utility operations and capital costs while minimizing rates for customers to the greatest degree possible. The Sewer Rate Study-2013 has reviewed and projected revenue and expenditures for 10 years. Proposed fee structures are described for the next 5 years.

BACKGROUND: On March 29th, 2013, the City entered into a contract with Veenstra & Kimm, Inc. to review income and expenditures for the sewer and collection/drainage enterprise fund for both residential and commercial sewer users. Reviews and projections of revenue for a 10 year period were also requested. Veenstra & Kimm, Inc. has completed the work and is prepared to present recommendations to the City Council.

RECOMMENDATION/RATIONALE: City staff requests that Bob Veenstra of Veenstra & Kimm, Inc. present his analysis and recommendations for the Sewer Rate Study-2013 at the August 1st, 2013 City Council meeting. No formal action is to be taken at this time until Council has had time to read the study and bring questions to the rate study author. Formal consideration will be in the form of a resolution to be voted on at the Council meeting scheduled for August 15th.

VEENSTRA & KIMM, INC.
3000 Westown Parkway • West Des Moines, Iowa 50266-1320
515-225-8000 • 515-225-7848(FAX) • 800-241-8000(WATS)

July 25, 2013

Nancy Lueck
Finance Director
City of Muscatine
215 Sycamore
Muscatine, Iowa 52761-3840

MUSCATINE, IOWA
SEWER RATE STUDY – 2013
ANALYSIS AND RECOMMENDATIONS

This letter is to present the results of the rate study for the City of Muscatine's sewer related funds. The sewer rate study evaluated three funds for the City of Muscatine. The funds evaluated include:

- Water Pollution Control Operations Fund
- Water Pollution Control Reserve Fund
- Collection and Drainage Fund

The City of Muscatine's sanitary sewer fees consist of two rates. The first rate is charged for sanitary sewer usage. Revenue for sanitary sewer usage fees are accounted for as revenue in the Water Pollution Control Operations Fund. Revenue from the Water Pollution Control Operations Fund is transferred to the Water Pollution Control Reserve Fund for the purpose of funding capital improvements related to the Water Pollution Control Plant and lift stations.

The second rate is the collection and drainage fee. The revenue from the collection and drainage fee is accounted for as revenue in the Collection and Drainage Fund. The collection and drainage fees are used to fund the operations of the collection and drainage system and the storm sewer system.

SANITARY SEWER RATE

The sanitary sewer rate for the City of Muscatine consists of two components. The first component is a monthly base fee. The second component is the commodity rate. The history of the sanitary sewer rates is as follows:

Fiscal Year	Monthly Base Fee	Commodity Rate ($/100 cf)
2008 – 2009	$5.85	$1.95
2009 – 2010	$6.10	$2.05
2010 – 2011	$6.35	$2.15
2011 – 2012	$6.60	$2.25
2012 – 2013	$6.85	$2.35

In addition to the standard rates the City of Muscatine includes a $1.00 per month discount for qualified senior citizens. The City charges a base fee consisting of the monthly minimum and 3 ccf of usage. The monthly base fee for a residential user is $13.90 and $12.90 per month for a senior citizen.

Sanitary sewer rates have increased over the last 5 fiscal years to fund inflationary increases in the cost of operating the Water Pollution Control Plant and lift stations. Also, sewer rates were increased to provide revenue to fund the debt service on the recently completed improvements to the Water Pollution Control Plant.

The City has historically evaluated the average monthly bill for a typical residential user (Class I) based on the usage of 6.0 commodity units, or 6 ccf. The average residential bill over the last 5 fiscal years has been as follows:

Fiscal Year	Average Residential Bill
2008 – 2009	$17.55
2009 – 2010	$18.40
2010 – 2011	$19.25
2011 – 2012	$20.10
2012 – 2013	$20.95

Over the last 5 fiscal years the average monthly bill for a residential customer has increased at the rate of $0.85 per month. The rate increase consisted of an increase of $0.25 in the minimum and $0.10 in the commodity charge.

WATER POLLUTION CONTROL OPERATIONS FUND

A summary of the revenue and expenses of the Water Pollution Control Operations Fund over the last 5 fiscal years is as follows:

Description	FY2008-2009	FY2009-2010	FY2010-2011	FY2011-2012	FY 2012-2013 (Estimate)
Total Revenue	$3,578,677	$3,931,222	$3,622,479	$3,774,433	$4,380,100
Total Expenditures	$3,850,784	$3,324,039	$3,494,307	$4,073,744	$4,526,839
Annual Gain/Loss	-$272,107	$607,183	$128,172	-$299,311	-$146,179

The summary of revenues and expenses indicates there was a noticeable increase in revenue in the fiscal year ending June 30, 2013. The increase in revenue is partially the result of a transfer in from the Water Pollution Control Reserve Fund in the amount of $255,200. Without this transfer the loss in the fiscal year would have been approximately $400,000, rather than the projected loss of approximately $146,739.

The budget for FY2013-2014 includes a $65,000 transfer in from the Water Pollution Control Reserve Fund. Going forward this transfer is not scheduled to continue.

The fund balance at the end of the fiscal year in the Water Pollution Control Operations Fund is as follows:

Fiscal Year	Year End Fund Balance
2008 – 2009	$1,405,788
2009 – 2010	$2,012,971
2010 – 2011	$2,141,143
2011 – 2012	$1,841,832
2012 – 2013 (Estimated)	$1,695,093

Over the past 5 fiscal years the expenditures in the Water Pollution Control Operations Fund increased more rapidly than the revenue. A major component of the increase is the result of the debt service for the Water Pollution Control Plant project.

The debt service on the Water Pollution Control Plant project is the only debt service outstanding for the City's sewer enterprise. The annual debt service transferred from the Water Pollution Control Operations Fund to the bond sanitary fund over the past 5 fiscal years is as follows:

Fiscal Year	Debt Service
2008 – 2009	$232,161
2009 – 2010	$495,474
2010 – 2011	$715,795
2011 – 2012	$1,061,333
2012 – 2013	$1,063,339

The full debt service on the SRF loan for the Water Pollution Control Plant Improvements project was experienced in the fiscal year ending June 30, 2012. For the next approximately 20 years the annual debt service on the loan will range from approximately $1,060,000 to $1,070,000 per year.

While the debt service paid from the Water Pollution Control Operations Fund will remain stable for the next 5 years, the City will continue to experience annual increases in its operating expenditures. The expenditures for plant operations, pump stations, laboratory operations, and biosolids operations increase annually between 2% and 3.5% as a result of inflationary increases in expenditures, including personnel and non-personnel costs.

Through FY2010-2011 the City transferred to the Water Pollution Control Reserve Fund the amount of $270,000 per year. Starting in FY2011-2012 the transfer to the Water Pollution Control Reserve Fund was decreased to $200,000 per year.

Starting in FY2011-2012 the City began transferring $200,000 per year from the Water Pollution Control Operations Fund to the West Hill Project Reserve Fund. The impact of these two changes in transfers resulted in a $130,000 increase in the annual transfers.

The City has only a few minor capital projects that are funded from the Water Pollution Control Operations Fund. None of those projects are identified after July 1, 2013. After July 1, 2013 all of the identified capital projects for the Water Pollution Control Plant and lift stations are scheduled to be funded from the Water Pollution Control Reserve Fund.

The analysis of the Water Pollution Control Operations Fund looked at the historical revenues and expenses over the period FY2008-2009 through the updated projection for the fiscal year that ended on June 30, 2013.

Revenues and expenses were projected forward through FY2023-2024, or the current fiscal year and the next 10 fiscal years. Although the analysis looked at revenues and expenses for an 11 year period, there was a recognition the primary analysis covered the 5 fiscal years beginning on July 1, 2013 and extending through June 30, 2018.

For the final 6 years of the analysis the evaluation looked at trend lines for revenues and expenditures. The purpose of the trend line analysis is to determine if there are any major changes in expenditures in years 6 through 11 of the analysis that would require adjustments of the sewer rates in the first 5 years.

The analysis of the 5 years covering FY2013-2014 through FY2017-2018 was more detailed and intended to set the sewer rates for the Water Pollution Control Operations Fund.

The first step in the analysis is to look at what would occur in the Water Pollution Control Operations Fund if no rate increases were enacted. This projection provides a baseline for the analysis.

The summary of the projected revenues and expenses of the Water Pollution Control Operations Fund with no rate increases is as follows:

Description	FY2013-2014	FY2014-2015	FY2015-2016	FY2016-2017	FY2017-2018
Total Revenue	$4,107,298	$4,042,298	$4,042,298	$4,042,298	$4,042,298
Total Expenditures	$4,337,344	$4,383,300	$4,438,193	$4,494,575	$4,552,436
Annual Gain and Loss	-$230,047	-$341,002	-$395,895	-$452,277	-$510,138
Year End Fund Balance	$1,465,047	$1,124,045	$728,149	$275,872	-$234,266

The analysis of the fund without any adjustment in sewer rates indicates the fund would experience an annual loss for each of the 5 fiscal years. Without the $65,000 transfer from the Water Pollution Control Reserve Fund the loss in FY2013-2014 would be approximately $295,000. The loss increases at a rate of approximately $45,000 to $47,000 per year for each of the 4 fiscal years, reaching an annual loss of $510,000 per year in FY2017-2018. If the projection were to continue forward the annual losses would continue through the next 5 fiscal years at approximately the same rate.

The fund balance of the Water Pollution Control Operations Fund would become negative in FY2017-2018. The negative balance in the Water Pollution Control Operations Fund would continue in FY2018-2019 and each year after FY2018-2019.

Under the provisions of the SRF loan used to finance the Water Pollution Control Plant Improvement project the City of Muscatine is required to have net revenue equal to 110% of the debt service. This requirement is referred to as coverage. Net revenue is defined as the total revenue less the operating expenditures of the enterprise fund. In calculating net revenue, the City is able to exclude discretionary expenditures such as the transfers for capital projects. At the present time the City appears to be just meeting the coverage requirement when the discretionary transfers are factored into the net revenue. At the

current trend of expenditures, the revenues will not be adequate to allow the City to meet the coverage test as early as FY2013-2014.

The Water Pollution Control Operations Fund is considered an enterprise fund. The enterprise fund should be self-sustaining. The enterprise fund should not operate with a negative fund balance.

Because of the ongoing expenditures in the Water Pollution Control Operations Fund the Water Pollution Control Plant Operations Fund should maintain a minimum fund balance. For a utility the size of Muscatine the minimum fund balance is considered to be 20% of annual expenditures. While 20% is considered a minimum fund balance, the recommended fund balance is between 30% and 40% of annual expenditures. This level of fund balance provides the City adequate resources to fund unplanned expenditures or capital expenditures.

Based on the current sewer rates, the City will fail to meet the coverage requirement in FY2013-2014. The fund balance will fall below the recommended 20% reserve level in FY2015-2016 and the fund balance will be negative as early as FY2017-2018. The options available for the City are to adjust the sewer rates to provide adequate revenue, or to reduce expenditures to a level consistent with revenues. Reducing expenditures would require a decrease in the level of service. Because most of the operating expenditures are for the operation of the Water Pollution Control Plant and lift stations it is difficult to significantly reduce service levels and still meet permit limits.

The second part of the evaluation looked at annual rate increases that would maintain the current service level and provide resources to meet both the coverage requirement under the SRF loan and to provide a reserve in the range of 30% to 35% of annual revenue.

The evaluation of rate increase alternatives focused on two models. The first model is based on increasing sewer rates in FY2013-2014 to generate enough revenue to eliminate the annual loss currently being experienced in the Water Pollution Control Operations Fund. In the following four fiscal years smaller inflationary rate increases would be required.

The second model looked at a uniform rate increase each year over the 5 fiscal years. The goal would be to eliminate the annual loss over the next 3 to 4 fiscal years and restore the fund to an annual gain position by the end of the 5 fiscal years. This model allows for a decrease in the fund balance over 3 or 4 fiscal years, followed by a recovery in the fund balance by FY2017-2018.

The first model required a 6% to 6.5% rate increase effective early in the current fiscal year, followed by a 3% rate increase on July 1, 2014 and rate increases in the 2% range for the following 3 fiscal years.

The second model was based on a 3% rate increase annually for each of the 5 fiscal years, starting with current fiscal year.

Since the City enacted the current rate structure approximately 10 years ago, the City Council has tried to avoid large rate increases. The City Council has focused on implementing smaller rate increases on an annual basis.

Based on the historical pattern of the City and in consultation with City staff the second model appears to be preferred. This model would involve the implementation of a 3% rate increase early in the current fiscal year and a 3% rate increase effective on July 1 of each of the years from July 1, 2014 through July 1, 2017.

The attached Table 1 shows the analysis of the Water Pollution Control Operations Fund based on the 3% annual rate increase.

A summary of the revenue and expenses in the current fiscal year and the next 4 fiscal years based on the 3% annual rate increase is as follows:

Description	FY2013-2014	FY2014-2015	FY2015-2016	FY2016-2017	FY2017-2018
Total Revenue	$4,207,560	$4,261,912	$4,384,840	$4,511,456	$4,641,871
Total Expenditures	$4,337,344	$4,383,360	$4,438,193	$4,494,575	$4,552,436
Annual Gain and Loss	-$129,779	-$121,388	-$53,353	$16,881	$89,435
Year End Fund Balance	$1,565,314	$1,443,926	$1,390,573	$1,407,459	$1,496,889

With the 3% rate increases the annual loss in the current fiscal year is projected to be approximately $130,000. By FY2016-2017 the Water Pollution Control Operations Fund is projected to approximately break even. In the final year, FY2017-2018, the Water Pollution Control Operations Fund shows a gain of approximately $89,000 for the year.

The fund balance falls to a low of $1,390,000 as of June 30, 2016. Although the fund balance is a decrease from the current level, it still maintains a reasonable cushion above the recommended minimum fund balance.

With the proposed rates the Class I residential sewer rates would be as follows:

	Current FY2012-2013	FY2013-2014	FY2014-2015	FY2015-2016	FY2016-2017	FY2017-2018
Minimum	$6.85	$7.06	$7.27	$7.49	$7.71	$7.94
Commodity Rate	$2.35	$2.42	$2.49	$2.57	$2.64	$2.72

With the proposed rate increases, the average residential bill based on 6 ccf per month would be as follows:

FY2012-2013	$20.95
FY2013-2014	$21.58
FY2014-2015	$22.21
FY2015-2016	$22.91
FY2016-2017	$23.55
FY2017-2018	$24.26

In considering any sewer rate increase it is often beneficial to know how the City's rates compare to similar communities. The following table shows the current average monthly sewer bill for the City of Muscatine compared to other communities in Iowa. The comparison is based on the City of Muscatine average usage of 6 ccf.

City	Average Monthly Bill
Coralville	$17.58
Muscatine (FY2012-2013)	$20.95
Muscatine (FY2013-2014)	$21.58
Dubuque	$23.93
Burlington	$26.94
Davenport	$29.03
Iowa City	$32.09
Clinton	$40.74
Moline	$43.46

One of the major components of revenue for the City of Muscatine is the agreement with Heinz. Unlike all other users in the City, Heinz is subject to an agreement that establishes a minimum annual sewer fee.

In 2012 the City approved the fourth supplement to the agreement with Heinz. The supplement agreed to extend the sewer user charge rate for the period May 1, 2012 through April 30, 2013 through the year ending on April 30, 2014. Although there will be a recommended increase in all user charge rates in the FY2013-2014, Heinz will not experience a rate increase during this period.

The City has initiated negotiations with Heinz for an extension of the agreement. The City has proposed an agreement that would extend through April 30, 2018. The City has proposed rate increases ranging from 3% annually to 3.8% annually for the 4 fiscal years starting on May 1, 2014 and continuing through April 30, 2018. The 3% rate increase coincides with the rate increase in the Heinz agreement for the 3 years up through April 30, 2013. The 3% rate increase also coincides with the recommended rate increase for other customers in the City.

The 3.8% rate for the 4 fiscal years is an effort to recover the 3% rate increase that will not be experienced by Heinz in the current fiscal year.

The outcome of the negotiations with Heinz will not be known for several months. For purposes of projecting the future revenues and expenses of the Water Pollution Control Operations Fund it is assumed the agreement with Heinz will be based on the 3% annual increase effective May 1, 2014, and continuing for the subsequent 3 fiscal years, beginning on May 1 of each year.

WATER POLLUTION CONTROL RESERVE FUND

The Water Pollution Control Reserve Fund is used to fund capital improvements at the Water Pollution Control Plant and lift stations. The revenue to the Water Pollution Control Reserve Fund is the transfer of funds in from the Water Pollution Control Operations Fund and interest generated by the fund balance in the Water Pollution Control Reserve Fund.

The expenditures of the Water Pollution Control Reserve Fund are capital improvements to the Water Pollution Control Plant and lift stations.

Over the past 3 years the City has decreased the fund balance of the Water Pollution Control Reserve Fund by funding a portion of the Water Pollution Control Plant project. This decrease in the fund balance between June 30, 2010 and June 30, 2013 was planned as part of the funding of the Water Pollution Control Plant project funding.

The following table shows the revenues and expenditures from the Water Pollution Control Reserve Fund for the 3 fiscal years ending June 30, 2013.

Description	FY2010-2011	FY2011-2012	FY2012-2013
Total Revenue	$278,349	$206,535	$203,500
Total Expenditures	$280,251	$1,548,642	$681,900
Annual Gain/Loss	-$1,902	-$1,342,107	-$478,400
Year End Fund Balance	$3,834,810	$2,492,703	$2,014,303

The City decreased the fund balance of the Water Pollution Control Reserve Fund by approximately $1,800,000 over the last 3 fiscal years. The fund balance on June 30, 2013 was estimated to be $2,014,303.

The Water Pollution Control Reserve Fund is used only to fund capital improvements. The fund balance must be targeted to generate sufficient revenue to fund the capital improvements. Beyond funding the capital improvements there is no requirement for a minimum fund balance in the Water Pollution Control Reserve Fund.

For purposes of the rate analysis, the capital improvements that are not yet implemented include the current laboratory expansion project and three future projects. The future projects are:

Project	Estimated Cost	Implementation Year
Hauled Waste Dump Site	$700,000	FY2014-2015
Dredge Pipeline	$600,000	FY2018-2019
Nutrient Removal	$1,300,000	FY2020-2021

Table 2 shows the projected revenues and expenses of the Water Pollution Control Reserve Fund over the 11 year period of the analysis.

The projection is based on the current annual transfer in from the Water Pollution Control Operations Fund of $200,000 per year. The analysis indicates during the 3 fiscal years when the City is projected to undertake major capital improvement projects associated with the Water Pollution Control Plant, the fund balance will decrease. In the years when no capital improvements are planned the fund balance will increase.

For the two capital improvement projects involving the hauled waste facility and the dredge pipeline adequate funds are available within the Water Pollution Control Reserve Fund to accommodate the expenditures. At the completion of the dredge pipeline project in FY2018-2019, the fund balance in the Water Pollution Control Reserve Fund is projected to be $1,267,303, or a decrease of approximately $750,000 from the current fund balance.

The analysis is based on returning the transfer from the Water Pollution Control Operations Fund to $270,000 starting in FY2018-2019.

If the City implements a $1,300,000 nutrient removal project the fund balance at the completion of that project would decrease to a projected $583,000 on July 30, 2021. If no other capital improvements are undertaken, the fund balance would then recover at a rate of approximately $270,000 per year through FY2023-2024 and reach a balance of $1,402,000 on June 30, 2024.

The largest unknown with respect to the Water Pollution Control Reserve Fund is the cost and the timing of the nutrient removal project. The Iowa Department of Natural Resources has proposed certain requirements relative to nutrient removal including total nitrogen and total phosphorus. At this time the City of Muscatine has not completed a detailed evaluation of the cost of meeting the nutrient standards as proposed by the Iowa Department of Natural Resources.

The Iowa Department of Natural Resources has just started issuing draft permits with the proposed standards. Based on the current progress of permitting it would appear the earliest the City would likely need to meet the permit nutrient standards would be FY2020-2021.

The current rate study is not recommending an increase in the transfer to the Water Pollution Control Reserve Fund at this time. Over the next 5 years the City should concentrate on restoring the fiscal condition of the Water Pollution Control Operations Fund. The transfer is shown to increase to $270,000 per year starting in FY2018-2019.

During the next update of the rate study anticipated in late 2017 or early 2018, the City should have a much better estimate of the cost and the timing of improvements to meet the nutrient removal standards. At that time the City will need to evaluate the funding of the nutrient removal project and look at adjusting rates to fund future debt service or to build up additional reserves in the Water Pollution Control Reserve Fund if the estimated project cost is greater than the currently estimated $1,300,000.

COLLECTION AND DRAINAGE FUND

The third fund evaluated as part of the rate study is the Collection and Drainage Fund. Approximately 6 years ago the City separated the Water Pollution Control Operations Fund and the Collection and Drainage Fund. This resulted in the City charging both a sanitary sewer fee and the collection and drainage fee.

The collection and drainage fee is a flat fee charged to all customers receiving a bill for any type of sewer enterprise service. A summary of the collection and drainage fee over the last 5 fiscal years is as follows:

Fiscal Year	Monthly Collection and Drainage Fee
FY2008-2009	$9.25
FY2009-2010	$9.70
FY2010-2011	$10.15
FY2011-2012	$10.60
FY2012-2013	$11.00

The revenue to the Collection and Drainage Fund is from the collection and drainage fee. Secondary revenue is gained from discharge permits, interest and miscellaneous revenues.

The expenditures of the Collection and Drainage Fund include operational costs for collection and drainage and stormwater operation. The third major expenditure in Collection and Drainage is the transfers out of the Collection and Drainage Fund. The transfers include a small administrative fee and three transfers to fund capital improvements to the collection and drainage system.

A summary of the revenues and expenses of the Collection and Drainage Fund over the last 5 fiscal years is as follows:

Description	FY2008-2009	FY2009-2010	FY2010-2011	FY2011-2012	FY2012-2013 (Estimated)
Revenue	$1,039,010	$1,071,443	$1,112,742	$1,166,570	$1,214,500
Expenses	$923,827	$943,417	$884,141	$1,090,424	$1,212,700
Annual Gain/Loss	$115,183	$128,026	$228,601	$76,146	$1,800
Year End Fund Balance	$460,447	$588,473	$817,074	$893,220	$895,020

The Collection and Drainage Fund is used as the revenue source for two types of expenditures. One type of expenditure is the ongoing operational expenditure. The second type of expenditure is the transfer to fund capital improvements.

The Collection and Drainage Fund differs from the Water Pollution Control Operations Fund in that both operating expenses and capital expenses are funded from the Collection and Drainage Fund. In the case of the Water Pollution Control Operations Fund, the capital expenditures are funded from the Water Pollution Control Reserve Fund.

The Collection and Drainage Fund is considered an enterprise fund. The Collection and Drainage Fund must be solvent on an ongoing basis. In evaluating the Collection and Drainage Fund there are recommendations for a minimum fund balance. With respect to only the operational component of the Collection and Drainage Fund, the minimum fund balance is recommended to be in the range of 25% of expenditures. Like the Water Pollution Control Operations Fund, the preferred fund balance is in the range of 30% to 35% of annual expenditures. Based on this test the minimum fund balance in the Collection and Drainage Fund should be approximately $225,000, and the preferred fund balance is in the range of $300,000.

In addition to the minimum fund balance, the Collection and Drainage Fund must take into consideration the timing of capital improvements. Because revenues are collected annually and capital improvements are funded periodically the fund balance must be allowed to rise above the recommended levels when the fund is being used to accumulate revenue for planned capital expenditures. The fund balance will rise well above the recommended minimum levels while funds are being accumulated. The fund balances are generally short term in nature and the fund balance will return to normal levels as the major capital expenditures are incurred.

In evaluating the fund balance of the Collection and Drainage Fund on a projected basis, it is important to look at both of these criteria in evaluating the reasonableness of the fund balance.

For the period FY2008-2009 through FY2010-2011 the fund balance of the Collection and Drainage Fund increased noticeably from approximately $460,000 to approximately $817,000. During this period the increase in the fund balance was planned to build up a reserve for future capital improvements. For the last 2 fiscal years, FY2011-2012 and FY2012-2013, the annual gain in the fund has been much smaller. The decrease in the annual gain is directly related to the beginning of the annual transfer to the West Hill Sewer Project Reserve.

The transfers out of the Collection and Drainage Fund consist of ongoing transfers as well as one time transfers. Ongoing transfers from the Collection and Drainage Fund include the following:

- Administrative Fees. There is an administrative fee transferred out of the Collection and Drainage Fund. For the fiscal year ending June 30, 2013 the transfer was $13,100. For the past several years this fund transfer increased at the rate of $400 per year. The fund transfer is expected to continue to the foreseeable future.

- Sewer Extension and Improvement Reserve. The City currently transfers $180,000 per year from the Collection and Drainage Fund to the sewer extension and improvement reserve. The City is projecting this annual transfer will increase to $200,000 per year starting in FY2014-2015. This transfer will continue through the balance of the 11 years of rate analysis.

- West Hill Sewer Project Reserve. Starting in FY2011-2012 the City transferred $200,000 per year to the West Hill Sewer Project Reserve. This transfer continued through the fiscal year ending June 30, 2013 and is projected to remain at the $200,000 level through the balance of the 11 year rate study.

- South End Force Main Air Release Valve Project. Starting in FY2012-2013 the City transferred $100,000 per year to the South End Force Main Air Release Valve project. This transfer is projected to continue for two additional fiscal years through FY2014-2015. This transfer is the only transfer that is multi-year, but does not continue for the entire period of the rate study.

The City has identified a number of one-time capital expenditures to be funded from the Collection and Drainage Fund. These one-time expenditures are:

Description	Amount	Fiscal Year
Jet Vac Truck	$350,000	FY2014-2015
Backhoe	$150,000	FY2015-2016
1 Ton Dump Truck	$35,000	FY2016-2017
3/4 Ton Pickup Truck	$25,000	FY2017-2018

At this time the City has not identified any capital expenditures for FY2018-2019 through the end of the study in FY2023-2024.

Over the next 5 fiscal years the fund balance in the Collection and Drainage Fund is estimated to decrease as a result of capital expenditures.

The rate study evaluated several options for rate increases for the collection and drainage fee. One alternative evaluated was no rate increase in the collection and drainage fee.

Under the no rate increase alternative, the fund balance of the collection and drainage fee would decrease to $61,500 by June 30, 2018. The fund balance would be negative beginning in FY2018-2019 and continue at a negative balance for the remaining period of the rate analysis.

With no rate increase the annual collection and drainage fee revenue would be less than the operational costs and fixed annual transfers. The no rate increase alternative would require the City to reduce its operational expenditures funded from the Collection and Drainage Fund or to reduce the transfers ongoing to the sanitary sewer replacement fund or the West Hill separation project. Neither of these options appeared satisfactory.

The second alternative evaluated was a 2% annual increase in the collection and drainage fee. The 2% annual increase resulted in the $580,000 decrease in the fund balance by FY2017-2018, but maintained a positive fund balance through FY2017-2018.
The 2% increase results in the collection and drainage fee being slightly more than adequate to fund the current operational expenditures and ongoing annual transfers. The 2% increase does not provide significant revenue for one-time capital expenditures beyond FY2017-2018.

The third alternative evaluated was a 3% annual increase in the collection and drainage fee. The 3% annual increase would mirror the 3% increase in the sanitary sewer rates.

With the 3% increase the fund balance on June 30, 2018 would be $436,400. The fund balance would increase to approximately $1,275,000 by June 30, 2024. The 3% increase generates revenue that would be available for yet unidentified capital improvements after June 30, 2018.

Because the City has not identified one-time capital improvements beyond June 30, 2018 it does not appear necessary to increase the collection and drainage fee at a rate greater than 2% annually. If the City were to add a number of one-time capital improvements, increase its operational expenditures for collection and drainage or stormwater operations, or increase the annual transfers the City will need to evaluate the adequacy of the collection and drainage fee.

The conclusion of the current rate study is a 2% annual increase is adequate and can be implemented for the next 5 fiscal years. Like the sanitary sewer rates, the addition of capital improvements beyond June 30, 2018 may require an increase in the collection and drainage fee during the next 5 years or at the time rates are evaluated for the period starting July 1, 2018.

The enclosed Table 3 shows the projected revenues and expenditures of the Collection and Drainage Fund based on the 2% annual rate increase. The revenues and expenses are summarized as follows:

Description	FY2013-2014	FY2014-2015	FY2015-2016	FY2016-2017	FY2017-2018
Revenues	$1,237,500	$1,256,760	$1,281,505	$1,306,745	$1,332,490
Total Expenditures	$1,249,300	$1,689,216	$1,411,259	$1,318,949	$1,332,305
Annual Gain or Loss	-$11,800	-$432,456	-$129,754	-$12,204	$185
Fund Balance at End of Fiscal Year	$883,220	$450,764	$321,010	$308,806	$308,991

The 2% rate increase shows a relatively stable fund balance over the period FY2015-2016 through FY2017-2018. The fund balance as of June 30, 2018 would be slightly above the minimum recommended fund balance.

Because the City has identified no capital improvements beyond July 1, 2018 the fund balance will increase during the subsequent fiscal years. However, the one-time capital expenditures from the collection and drainage fee generally involves equipment replacement. Typically, equipment replacement is not programmed more than 5 years in advance. Although the City does not show any one-time capital expenditures after July 1, 2018, it is quite likely there will be additional capital improvements during the subsequent 5 year period.

The City typically establishes the collection and drainage fee in an amount rounded to the nearest $0.05. If the 2% rate increase were implemented using the $0.05 rounding factor, the collection and drainage fee would be as follows:

Fiscal Year	Monthly Collection and Drainage Fee
FY2012-2013 (existing)	$11.00
FY2013-2014	$11.20
FY2014-2015	$11.45
FY2015-2016	$11.70
FY2016-2017	$11.90
FY2017-2018	$12.15

If you have any questions or comments concerning the project, please contact the writer at 800-241-8000.

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