

City Council Staff Report

June 17, 2015

Item 3

Prepared by: Debbie Sanchez

Public Hearing: Yes

REQUEST

Discuss the impact of reducing Sewer rates and consider adopting the

RESOLUTION AMENDING THE SCHEDULE OF SEWER RATES

DISCUSSION

In light of the information received from Spanish Fork, Council asked staff to reassess the impact of reducing sewer fees by \$10. Before that information was made known staff presented the following information to Council at the May 20, 2015 Council meeting.

- Current rate for a connected dwelling is \$40.76.
- Current rate for a non-connected dwelling is \$32.96.
- Estimated revenue from sewer charges for fiscal year 2014-2015 will be approximately **\$1,150,770**.
- A \$10.00 decrease with new growth will decrease revenue approximately **\$228,400**
- Revenue will be approximately **\$922,370**
- The Sewer Fund has three (3) outstanding bond issues.
 - \$6,330,000 Taxable Sewer Revenue Bond, Series 1995
 - \$3,070,000 Taxable Sewer and Refunding Bonds, Series 1997
 - \$1,110,000 Taxable Sewer Revenue Bonds, Series 2004
- The Series 1995 and Series 1997 Bonds will be paid in full on December 20, 2017
- The Series 2004 Bonds will be paid in full on January 25, 2024.
- Over the next two years the annual debt service on the bonds will be \$593,000.
- The coverage ratio requirement is 1.25x's debt service, requiring an **operating income** of **\$741,250**.
- Over the past seven (7) years the City has not met the coverage ratio requirement.
- The Sewer Fund has had sufficient Cash reserves to pay the debt service.
- By 2018 the only debt service in the Sewer fund will be the Series 2004 Bonds.
- Annual average debt service will be \$67,400, requiring an operating income of \$84,250.
- The Sewer fund will be able to meet this requirement for the remainder of the bond term.
- A \$10 rate decrease would reduce the Sewer Fund's Cash and Cash Equivalent reserves by **18.3%** or **\$304,184** over the next two years.
- With the Series 1995 and Series 1997 bonds no longer encumbering the Sewer fund, reserves will increase by **15.4%** or **\$252,264** in the third year.

On May 27, 2015, Cory Branch spoke with Dave Oyler, Spanish Fork City Manager, regarding upcoming improvements and costs to the existing sewer treatment plant. A report has been submitted to the State outlining the current standards that are being added to the plant. Both cities anticipate receiving a follow up report from the State by August of this year which will outline what new standards will need to be met moving forward. It is anticipated that the new requirements to the plant will cost Mapleton City \$1 million dollars and construction will not start until Fiscal Year 2017/18.

The City’s engineer, Gary Calder has indicated that the City’s sewer system is relatively new and has sufficient capacity to meet current and future needs. He also indicates that current budget figures are sufficient to meet the maintenance needs of the Sewer System. Please see the attached memo “Sewer System”.

With that background staff presents the following options for Councils consideration:

Option 1 - Do Not Reduce Rates by \$10 and Pay Cash for Sewer Line Project @ \$1,000,000
Cash Reserves increase \$556,448 by the third year to \$1,939,246
Pay on Sewer project with cash - reduces Cash Reserves to \$939,246
Median Days Cash on hand = 835 days (\$939,246/ \$411,185)
Coverage Compliance @ 1.25x's = \$85,000 (\$67,880 x 1.25)
Net Operating Income = \$805,485 (\$876,365-\$67,880) or 11.87 x's coverage
Excellent Position – Council would choose this option if Council prefers to pay cash for the SF Sewer Project. Council can also choose to either pay cash or bond for future Capital needs depending on costs.

Option 2 - Reduce Rates by \$10 and Bond for Sewer Line Project @ \$1,000,000
Cash Reserves down \$304,184 over next two years to \$1,382,798
Cash Reserves increase \$252,264 in the third year to \$1,635,062
Bond for Sewer project - reduces Cash Reserves to \$1,567,182
Median Days Cash on hand = 1,394 days (\$1,567,182/ \$411,185)
Encumbered 10-20 years - Increase Annual Debt Service by approximately \$67,880 to \$135,760
Coverage Compliance @ 1.25x's = \$169,700 (\$135,760 x 1.25)
Net Operating Income = \$433,425 (\$569,185 -\$135,760) or 3.20 x's coverage
Excellent Position – Council would choose this option if Council prefers to bond for the SF Sewer Project. Future bonding may be limited as coverage is reduced. Possible to pay for future Capital needs with cash depending on costs.

Option 3 - Reduce Rates by \$10 and Pay Cash for Sewer Line Project @ \$1,000,000
Cash Reserves down \$304,184 over next two years to \$1,382,798
Cash Reserves increase \$252,264 in the third year to \$1,635,062
Pay for Sewer project with cash - reduces Cash Reserves to \$635,062
Median Days Cash on hand = 565 days (\$635,062/ \$411,185)
Coverage Compliance @ 1.25x's = \$85,000 (\$67,880 x 1.25)
Net Operating Income = \$501,305 (\$569,185 -\$67,880) or 5.90 x's coverage
Strong Position – Council would choose this option if Council prefers to pay cash for SF Sewer Project but will have to bond for future major Capital needs depending on costs.

We have also provided the following information to show what the impact of reduced sewer rates would be if the project cost comes in higher than anticipated.

Reduce Rates by \$10 and Bond for Sewer Line Project @ \$2,000,000
Cash Reserves down \$304,184 over next two years to \$1,382,798
Cash Reserves increase \$252,264 in the third year to \$1,635,062
Bond for Spanish Fork project - reduces Cash Reserves by \$175,000 to \$1,460,062
Median Days Cash on hand = 1,295 days (\$1,460,062/ \$411,185)
Encumbered 20 years - Increase annual Debt Service by approximately \$175,000 to \$242,720
Coverage Compliance @ 1.25x's = \$303,400 (\$242,720 x 1.25)
Net Operating Income = \$326,465 (\$569,185 -\$242,720) or 1.35 x's coverage
Good Position

RECOMMENATION

Move to accept one of the 3 options listed above and if necessary adopt the **RESOLUTION AMENDING THE SCHEDULE OF SEWER RATES** as presented.

Fiscal Year 2014-2015		Fiscal Year 2015-2016		Fiscal Year 2016-2017		Fiscal Year 2017-2018	
	Sewer		Sewer		Sewer		Sewer
CASH FLOWS FROM OPERATING ACTIVITIES							
Receipts from Customers	1,168,770	Receipts from Customers	940,370	Receipts from Customers	960,370	Receipts from Customers	980,370
Payments to Suppliers (Operations-Maintenance)	(190,914)	Payments to Suppliers (Operations-Maintenance)	(185,500)	Payments to Suppliers (Operations-Maintenance)	(187,355)	Payments to Suppliers (Operations-Maintenance)	(189,229)
Payments to Employees	(204,317)	Payments to Employees	(209,215)	Payments to Employees	(215,491)	Payments to Employees	(221,956)
NET CASH FLOWS FROM OPERATING ACTIVITIES	773,539	NET CASH FLOWS FROM OPERATING ACTIVITIES	545,655	NET CASH FLOWS FROM OPERATING ACTIVITIES	557,523	NET CASH FLOWS FROM OPERATING ACTIVITIES	569,185
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES							
Impact Fees	100,000	Impact Fees	85,000	Impact Fees	85,000	Impact Fees	85,000
Transfer from other Fund	-						
Transfer to other Fund - To CIP for Vehicle Replacement	(26,495)	Transfer to other Fund - To CIP for Vehicle Replacement	(31,201)	Transfer to other Fund - To CIP for Vehicle Replacement	(31,201)	Transfer to other Fund - To CIP for Vehicle Replacement	(31,201)
Acquisition of Capital Assets-See Capital Projects Below	(244,000)	Acquisition of Capital Assets-See Capital Projects Below	(198,000)	Acquisition of Capital Assets-See Capital Projects Below	(204,000)	Acquisition of Capital Assets-See Capital Projects Below	(310,000)
Debt Payments (1995, 1997, 2004 Sewer Bonds, Vactor Lease)	(644,626)	Debt Payments (1995, 1997, 2004 Sewer Bonds)	(582,000)	Debt Payments (2004 Sewer Bonds)	(524,080)	Debt Payments (2004 Sewer Bonds)	(59,000)
Interest Expense (2004 Sewer Bond, Vactor Lease)	(13,710)	Interest Expense (2004 Sewer Bond)	(11,000)	Interest Expense (2004 Sewer Bond)	(9,880)	Interest Expense (2004 Sewer Bond)	(8,720)
NET CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES	(828,831)	NET CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES	(737,201)	NET CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES	(684,161)	NET CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES	(323,921)
CASH FLOWS FROM INVESTING ACTIVITIES							
Interest Income	11,000	Interest Income	7,000	Interest Income	7,000	Interest Income	7,000
NET CASH FLOWS FROM INVESTING ACTIVITIES	11,000	NET CASH FLOWS FROM INVESTING ACTIVITIES	7,000	NET CASH FLOWS FROM INVESTING ACTIVITIES	7,000	NET CASH FLOWS FROM INVESTING ACTIVITIES	7,000
NET CHANGE IN CASH AND CASH EQUIVALENTS	(44,292)	NET CHANGE IN CASH AND CASH EQUIVALENTS	(184,546)	NET CHANGE IN CASH AND CASH EQUIVALENTS	(119,638)	NET CHANGE IN CASH AND CASH EQUIVALENTS	252,264
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	1,731,274	CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	1,686,982	CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	1,502,436	CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	1,382,798
CASH AND CASH EQUIVALENTS AT END OF YEAR LESS RESTRICTED CASH (IMPACT FEES)	1,686,982	CASH AND CASH EQUIVALENTS AT END OF YEAR LESS RESTRICTED CASH (IMPACT FEES)	1,502,436	CASH AND CASH EQUIVALENTS AT END OF YEAR LESS RESTRICTED CASH (IMPACT FEES)	1,382,798	CASH AND CASH EQUIVALENTS AT END OF YEAR LESS RESTRICTED CASH (IMPACT FEES)	1,635,062
	1,464,982		1,195,436		990,798		1,158,062
Capital Projects							
SUVMWA Project	(48,000)	SUVMWA Project	(48,000)	SUVMWA Project	(54,000)	SUVMWA Project	(60,000)
Sewer Maintenance	(30,000)	Sewer Maintenance	(100,000)	Sewer Maintenance	(100,000)	Sewer Maintenance	(100,000)
Sewer Treatment Plant Improvements -Spanish Fork	(56,000)	Sewer Treatment Plant Improvements -Spanish Fork	-	Sewer Treatment Plant Improvements -Spanish Fork	-	Sewer Treatment Plant Improvements -Spanish Fork	(100,000)
Lift Station Backup Generator	(50,000)	Lift Station Upgrade Backup Generator	(50,000)	Lift Station Backup Generator	(50,000)	Lift Station Backup Generator	(50,000)
Infiltration Monitor/Solution	(30,000)						
Rebuild Meter Station House	(30,000)						
Total Capital Projects Cash Use	(244,000)	Total Capital Projects Cash Use	(198,000)	Total Capital Projects Cash Use	(204,000)	Total Capital Projects Cash Use	(310,000)
Unfunded Capital Projects							
						Sewer TV	(100,000)
						Total Cash Needed for Unfunded Projects	(100,000)

	Fiscal Year 2008-2009 Sewer	Fiscal Year 2009-2010 Sewer	Fiscal Year 2010-2011 Sewer	Fiscal Year 2011-2012 Sewer	Fiscal Year 2012-2013 Sewer	Fiscal Year 2013-2014 Sewer	Fiscal Year 2014-2015 Sewer	Fiscal Year 2015-2016 Sewer	Fiscal Year 2016-2017 Sewer	Fiscal Year 2017-2018 Sewer
<u>OPERATING REVENUES</u>										
Charges for Services	981,540	1,010,131	1,031,917	1,051,058	1,081,027	1,122,757	1,150,770	922,370	942,370	962,370
Connections Fees	6,250	10,500	8,500	15,750	18,000	18,050	18,000	18,000	18,000	18,000
Miscellaneous	-	-	-	3,880	-	-	-	-	-	-
TOTAL OPERATING REVENUES	987,790	1,020,631	1,040,417	1,070,688	1,099,027	1,140,807	1,168,770	940,370	960,370	980,370
<u>OPERATING EXPENSES</u>										
Salaries and Benefits	341,285	294,720	262,978	283,990	196,833	201,250	204,317	209,215	215,491	221,956
Operation and Maintenance	288,517	236,554	228,181	285,846	201,290	241,683	190,914	185,500	187,355	189,229
Depreciation	-	-	-	-	-	-	-	-	-	-
TOTAL OPERATING EXPENSES	629,802	531,274	491,159	569,836	398,123	442,933	395,231	394,715	402,846	411,185
OPERATING INCOME (LOSS)	357,988	489,357	549,258	500,852	700,904	697,874	773,539	545,655	557,524	569,185
<u>NON-OPERATING REVENUES (EXPENSES)</u>										
Impact Fees	8,385	17,569	-	10,648	77,945	91,472	100,000	85,000	85,000	85,000
Interest Income	40,505	9,605	10,237	12,742	11,201	10,302	11,000	7,000	7,000	7,000
Interest Expense	(17,872)	(16,743)	(20,400)	(22,294)	(18,899)	(15,386)	(13,710)	(11,000)	(9,880)	(8,720)
TOTAL NON-OPERATING REVENUES (EXPENSES)	31,018	10,431	(10,163)	1,096	70,247	86,388	97,290	81,000	82,120	83,280
INCOME BEFORE CONTRIBUTIONS	389,006	499,788	539,095	501,948	771,151	784,262	870,829	626,655	639,644	652,465
Transfer from Other Funds			60,000			211,520	-	-	-	-
Transfer to Other Funds						(10,000)	(26,495)	(31,201)	(31,201)	(31,201)
Developer Contributions	86,950	11,600	11,600	50,000		-	-	-	-	-
CHANGE IN NET ASSETS	475,956	511,388	610,695	551,948	771,151	985,782	844,334	595,454	608,443	621,264
TOTAL NET ASSETS AT BEGINNING OF YEAR	9,249,652	9,725,608	10,236,996	10,847,691	11,399,639	12,170,790	13,156,572	14,000,906	14,596,360	15,204,803
TOTAL NET ASSETS AT END OF YEAR	9,725,608	10,236,996	10,847,691	11,399,639	12,170,790	13,156,572	14,000,906	14,596,360	15,204,803	15,826,067

RESOLUTION NO. 2015-

A RESOLUTION OF THE CITY OF MAPLETON, UTAH AMENDING THE SCHEDULE OF SEWER RATES

WHEREAS, the City's Sewer fund currently has three (3) outstanding bond issues consisting of the following;

\$6,330,000 Taxable Sewer Revenue Bond, Series 1995;
\$3,070,000 Taxable Sewer and Refunding Bonds, Series 1997;
\$1,110,000 Taxable Sewer Revenue Bonds, Series 2004; and

WHEREAS, the Series 1995 and Series 1997 bonds will be paid in full on December 20, 2017, and

WHEREAS, the current sewer rate for a connected dwelling is \$40.76 and the current sewer rate for a non-connected dwelling is \$32.96; and

WHEREAS, Mapleton City has analyzed the impact of reducing the existing sewer rates by \$10; and

WHEREAS, the analysis shows that with a \$10 rate decrease, the Sewer fund will see a reduction in its cash and cash equivalents balance for two consecutive years; and

WHEREAS, the analysis also shows that the Sewer fund will see a significant increase in its cash and cash equivalents balance when the Series 1995 and Series 1997 bonds are paid in full; and

WHEREAS, no major capital projects are anticipated for at least 3 years and, barring any emergencies, Mapleton City has determined that a \$10 reduction in the Sewer rate will generate sufficient revenues to cover the debt service and the cost of operations, excluding depreciation;

NOW THEREFORE, be it resolved by the City Council of Mapleton, Utah, that the Sewer rate table as presented in Exhibit A be adopted:

This resolution adopted this 17th day of June, 2015, by the City Council of Mapleton City, Utah with an effective date of July 1, 2015.

Brian Wall
Mayor

ATTEST:

Camille Brown
City Recorder

EXHIBIT A

Sewer Rate Table	
Sewer Connected	\$30.76
Sewer Not Connected	\$22.96

MEMORANDUM

TO Mayor Wall and City Council Members

FROM Gary Calder

DATE June 10, 2015

RE Sewer System

Background

The Mapleton City (City) sewer system was constructed in 1995-96. At that time, the City negotiated a connection to the Spanish Fork Waste Water Treatment Plant (SFWWTP) for treatment of City sewage. Mapleton City initially purchased 11% of the SFWWTP capacity. The City subsequently acquired 23% in the plant. In 2011 the City purchased an additional 3.4% as part of the EBCO annexation. This increase will be incremental as the addition of new homes in the EBCO annexation are added onto the system to an overall capacity of 26.4%. This 3.4% cost is being paid by the new homeowners' building permits within the EBCO annexation.

Since 2011 improvements have been made to the SFWWTP to increase the capacity to 8 million gallons/day. Mapleton City's allotment is approximately 1.8 to 2.1 million gallons/day, or a population of 16,500 or 4,230 ERU's. As of June 2015 we have 2086 ERU's/connections to our system. The Mountainland Association of Governments (MAG) estimates that the 2060 population of Mapleton City will be approximately 21,300 residents or 5,434 ERU's. In 2017/18 the SFWWTP will begin upgrading the plant. No engineering plans have been provided as to the cost; however, Spanish Fork City has communicated that the overall cost will be approximately \$4 million, thus Mapleton City's portion will total \$1 million.

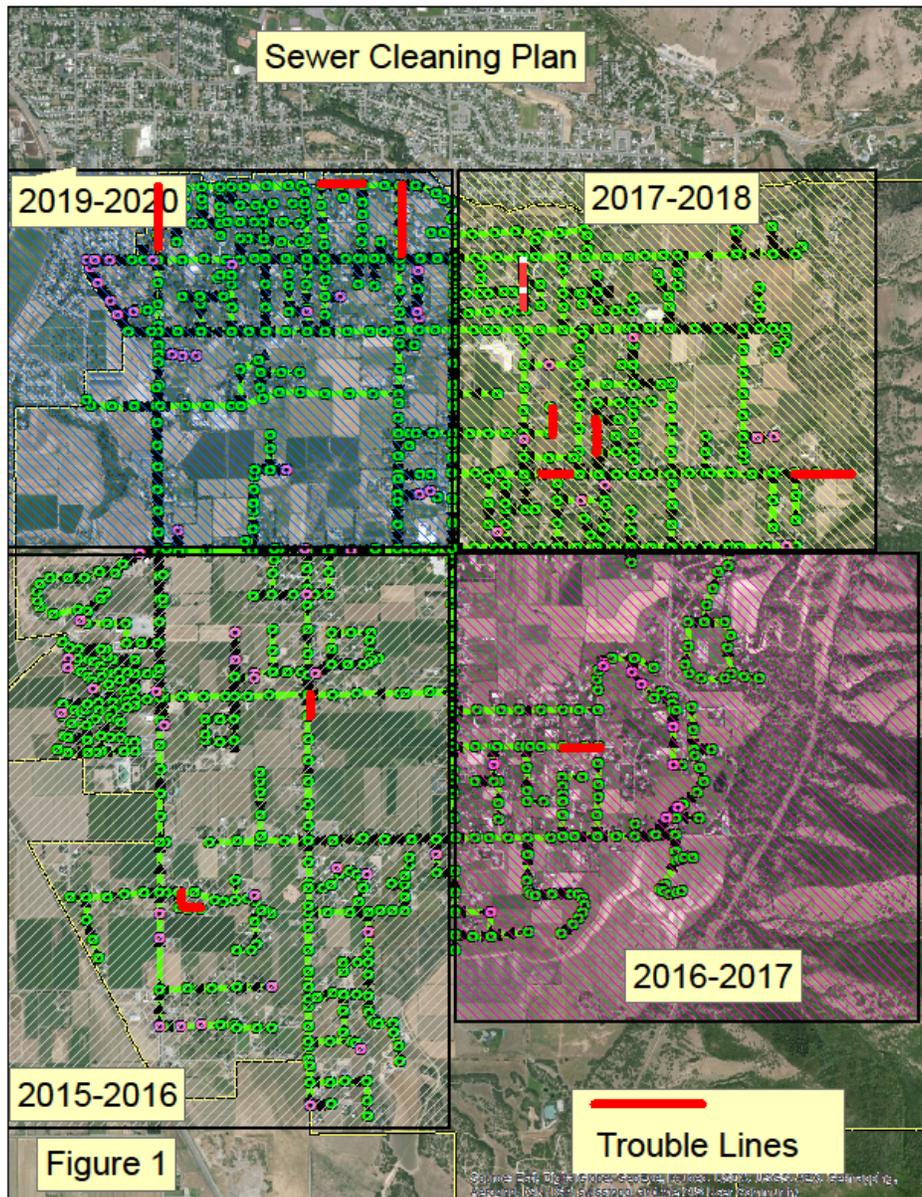
Collection System and Service Life of Sewer Pipe

The City sewer collection includes more than 250,500 lineal feet of sewer pipe ranging in size from 8" to 30" diameter. The sewer piping includes PVC and Reinforced Concrete Pipe (RCP). The Army Corp of Engineers states that both these pipes should have a design life of 75-100 years. Mapleton City is very fortunate in that all of our pipes would be classified as relatively new, and service life and design life is not a major issue. Keeping these pipes in top condition is our objective. The routine maintenance to date has brought to the attention of the Public Works Department certain troubled sections of pipe that need to be cleaned on an annual basis and evaluated. These sections of pipe are shown on Figure 1.

Within the latest budget 2015/16 we will begin to monitor and scrutinize these potential maintenance issues.

Sewer Maintenance

Since 2008, the Public Works Department began a maintenance and cleaning program to keep the sewer system operating efficiently. The cleaning is done on a routine basis and removes any accumulated debris/blockage in the pipe such as sand, silt, grease, egg shells, septic debris and rocks; this cleaning rotation is on a 4 year plan (Figure 1). The cleaning is done with a crew of 2-3 and utilizes a high pressure sewer jet and vacuum truck (Vactor). This Vactor truck carries approximately 1,500 to 2,000 gallons of water and can pump 65 gal/min at approximately 2-3,000 psi for cleaning the walls of the pipe.



The Public Works Department does not have a sewer TV truck; however, in this coming budget year we have budgeted additional monies to begin monitoring our sewer mains. A television inspection will show pipes that are cracked, have bad joints, roots intrusion and ground water infiltration. This television inspection and repairs will be completed by a contractor that specializes in this type of work. Ground water intrusion is a major concern with every sewer collection facility and should be treated accordingly.

Mapleton City sewer averages from 2006-2015 (Figure 2) show how infiltration increased our flow during the 2011 year. Infiltration at the SSFWWTP was estimated to be approximately 2.85 mgd in the spring of 2011. This was a historic high for the SFWWTP and represents the planning infiltration that should be expected at the facility during a wet climate year. Unknown to the city is if this infiltration is thru bad or broken pipes or individual homes that drain into our sewer system which is against city code. Monitoring and metering of sewer mains helps to detect these issues. We can associate it with spring run-off and the irrigation of the open space within the City.

Mapleton City Sewer Averages 2006 - 2015

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Average
Jan	375,392	403,396	432,187	440,909	399,252	247,287	692,988	428,844	476,300	481,782	437,834
Feb	378,791	402,939	412,381	360,700	333,418	436,091	607,457	576,389	485,559	461,167	445,489
Mar	384,899	384,219	440,276	332,411	356,543	820,625	977,083	642,650	409,692	462,939	521,134
Apr	481,790	388,487	399,010	377,529	429,756	1,002,137	565,050	580,645	441,323	429,714	509,544
May	460,286	411,184	426,410	372,766	353,362	518,914	683,489	579,667	488,214	457,786	475,208
Jun	617,199	462,940	535,017	363,330	471,796	849,042	479,894	577,428	492,906		538,839
Jul	876,526	591,087	602,525	433,350	513,621	670,101	619,301	613,536	612,412		614,718
Aug	734,795	631,125	664,672	575,623	660,143	1,092,749	719,116	571,238	772,321		713,531
Sep	551,605	619,861	704,294	592,033	813,279	1,478,144	678,136	297,255	729,710		718,257
Oct	455,267	549,377	603,050	499,993	636,214	1,011,530	659,241	1,006,050	583,086		667,090
Nov	431,754	497,065	549,230	474,541	771,644	679,126	548,860	474,032	521,962		549,802
Dec	413,313	468,188	501,652	405,428	614,586	582,537	445,950	480,700	511,387		491,527
Totals =	6,161,617	5,809,868	6,270,704	5,228,613	6,353,614	9,388,283	7,676,565	8,828,434	6,524,872	2,293,388	6,253,566
Ave/Mon	513,468	484,156	522,559	435,718	529,468	782,357	639,714	569,036	543,739	458,677	547,889

Connects.	1622	1668	1799	1824	1,837	1,855	1,930	1,993	2,073	2,086
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Ave Daily Use	316.56	290.26	290.48	238.88	288.23	421.76	331.46	285.52	262.3	219.88
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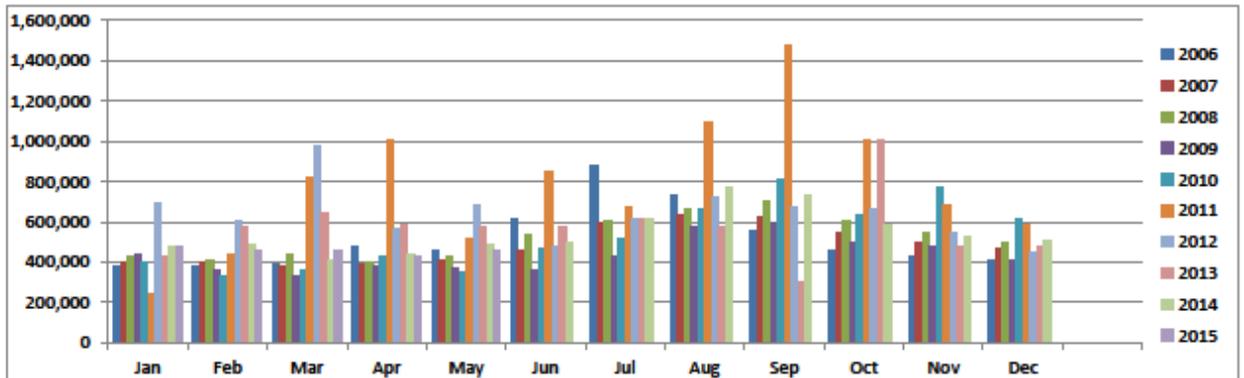


FIGURE 2

Recommendations

Currently the public works department is not aware of any major issues involving the sewer collection system. However: regular cleaning and inspection and minor repairs are essential to providing excellent service to the residents of Mapleton City. These minor items are currently covered within this new budget year and should remain a regular part of the maintenance program.