CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

Utilities Director: Chris W. Shaw Deputy Director Utilities: Christopher F. Stempa Public Works Director: Paula A. Vandehey Deputy Director/City Engineer: Ross M. Buetow Deputy Director of Operations-DPW: Nathan D. Loper

MISSION STATEMENT

The City of Appleton Wastewater Treatment and Collections Systems provide the community with essential wastewater treatment services utilizing the full potential of highly motivated and technically skilled staff. It is our goal to maintain maximum standards of community health and safety, while protecting and preserving the environment, in a manner that demonstrates integrity, responsibility, and economically sound practices.

DISCUSSION OF SIGNIFICANT 2017 EVENTS

WASTEWATER TREATMENT

Total Maximum Daily Load

The Appleton Wastewater Treatment Plant's (AWWTP) Wisconsin Discharge Elimination System (WPDES) permit was reissued effective April 1, 2017. The reissued permit contains language addressing lower phosphorus and total suspended solids treatment limits resulting from Total Maximum Daily Load (TMDL) legislation. During 2017 the AWWTP continued full-scale chemical treatment studies to determine the ability to consistently meet future total phosphorus effluent loading limits (e.g. 23 pound per day as six month average) while staying abreast of alternative compliance opportunities provided through Water Quality Trading (WQT) and Adaptive Management (AM).

Midway Road Lift Station Improvements

Preliminary engineering to site a stand-by emergency power generator at the Midway Lift Station was initiated in the fall of 2015. Further project development during 2016 identified spatial limitations within the Midway Road right-of-way that were coupled with existing underground utilities along the north side of the lift station site. Those findings necessitated the steps to acquire a parcel of land immediately north of the existing (within existing stormwater and utility easements) to locate the emergency standby generator. The project was re-budgeted for 2017 to include land purchase as well as site improvements that will facilitate emergency access off of Midway Road by Utility maintenance vehicles.

F2 Building Chemical Storage Room Improvements

This CIP was initiated in 2017 for the intended purpose of rehabilitating the existing iron salt chemical storage room after 22 years of continuous use. It also incorporates improvements to the chemical feed system that will allow for precision chemical dosing necessary to consistently achieve future low-level phosphorus limits. The project bidding phase is scheduled for late summer 2017 with active construction forecasted for completion by March 1, 2018.

Digester Compressor Glycol System, WAS Pump Replacement, Effluent Pump Firm Capacity, and Aeration Blower Replacement

The 2017 Wastewater Treatment Plant Improvements Project involves equipment rehabilitation, replacement, and improvements to address immediate needs and long term reliability associated with four independent processes. The preliminary engineering phases throughout 2017 are focused on delivering a complete conditions assessment and project alternatives technical document. That document is to include observations, data, alternatives, costs, conclusions, and recommendations that will be used to consolidate four independent projects for streamlining purposes into a single construction project to be bid out in early 2018. Forecasted final construction completion is January 1, 2019.

WASTEWATER COLLECTION

Reconstructed / rehabilitated approximately 1.68 miles of sanitary sewer and adding 1.10 miles of new sewer. Completed the fifth/final year of a comprehensive flow monitoring project covering approximately 15% of the City's sanitary collection system, which helped identify and address areas of inflow/infiltration into our collection system. Developed policy language for replacement of laterals on private property to be implemented in 2018. Used the sewer televising program to identify and resolve several significant grease issues.

MAJOR 2018 OBJECTIVES

The Departments of Public Works and Utilities will work together to provide effective and efficient operation of the Wastewater Utility to: Provide treatment that meets or exceeds State and federal water guality standards that are established in the reissued April 1, 2017 WPDES permit. This permit includes a compliance schedule for reporting requirements within the 5-year permit term including reference to future more stringent discharge limits for effluent phosphorus and total suspended solids under NR 102, NR 217, and Lower Fox River Total Maximum Daily Load (TMDL) legislation. Continue to evaluate phosphorus loading sources and potential for source reduction, further investigate and refine existing treatment optimization opportunities, and research new treatment technologies capable of achieving future water quality based effluent limits for phosphorus Continue to engage and participate in Adaptive Management and Water Quality Trading opportunities that have the potential of meeting new phosphorus limits and reduction criteria set forth in the TMDL and NR 217. Provide the citizens of Appleton with efficient, safe, and cost-effective treatment of its residential, commercial, and industrial wastewaters Provide for both short-term and long-term facility planning and management to address community growth and increased wastewater treatment needs Optimize and maintain plant processes and capital assets to produce a high quality effluent, while maximizing biogas utilization and reducing overall energy consumption. Provide biosolids and compost product of high guality and in demand for a variety of beneficial uses while continuing to explore biosolids diversification opportunities. The following project completions will enhance longevity of wastewater treatment infrastructure: aeration blower replacement, effluent pump station rehabilitation, and lift station upgrades. Continue the clear water program to reduce inflow into wastewater system Complete the annual sewer cleaning program and identify areas of concern Promptly respond to emergency sewer backups Continue major interceptor rehabilitation to maintain the system at a level that will accommodate growth and increased wastewater needs Reduce the amount of inflow and infiltration into the sanitary sewer system Use City's sewer truck camera to identify problem areas and address them accordingly Continue to update the City sanitary sewer database Use our televising software to assist in the programming of sewer spot repairs, protruding taps and mineral deposits Update a Capacity, Management, Operations and Maintenance (CMOM) Plan to meet WisDNR requirements

Program Revenues \$ 11,961,241 \$ 12,005,596 \$ 11,615,353 \$ 11,534,806 -0.699 Program Expenses			DEPA	RTMENT BUDG	GET SUMMARY			
Program Revenues \$ 11,961,241 \$ 12,005,596 \$ 11,615,353 \$ 11,534,806 -0.696 Program Expenses		Programs	Act	ual				%
Program Expenses 5411 Utility Administration 741,943 249,548 264,520 266,409 288,644 9.125 5412 Finance Administration 4,732,755 4,709,778 5,271,627 5,271,627 5,029,876 -4.595 5422 Treatment 3,501,993 3,580,557 3,721,007 3,831,283 3,862,350 3.805 5423 Biosolids Management 554,053 587,180 779,572 783,821 679,240 -12.876 5425 Lift Stations 87,547 133,453 184,859 184,859 127,799 -30.875 5427 Collection Systems 898,399 736,302 837,224 931,145 753,166 -10.046 5431 Public Works Capital 548,563 386,226 3,484,804 4,167,736 2,235,551 -35.856 5432 Utility Capital 131,705 82,441 4,081,500 4,321,961 3,364,250 -17.576 Total Program Expenses \$11,196,958 \$10,465,485 \$18,625,113 \$19,758	Unit	Title	2015	2016	Adopted 2017	Amended 2017	2018	Change *
5411 Utility Administration 741,943 249,548 264,520 266,409 288,644 9.124 5412 Finance Administration 4,732,755 4,709,778 5,271,627 5,271,627 5,029,876 -4.599 5422 Treatment 3,501,993 3,580,557 3,721,007 3,831,283 3,862,350 3.800 5423 Biosolids Management 554,053 587,180 779,572 783,821 679,240 -12.875 5425 Lift Stations 87,547 133,453 184,859 184,859 127,799 -30.876 5427 Collection Systems 898,399 736,302 837,224 931,145 753,166 -10.045 5431 Public Works Capital 131,705 82,441 4,081,500 4,321,961 3,364,250 -17.576 Total Program Expenses \$11,196,958 \$10,465,485 \$18,625,113 \$19,758,841 \$16,340,876 -12.266 Expenses Comprised Of:			\$ 11,961,241	\$ 12,005,596	\$ 11,615,353	\$ 11,615,353	\$ 11,534,806	-0.69%
5412 Finance Administration 4,732,755 4,709,778 5,271,627 5,029,876 -4.594 5422 Treatment 3,501,993 3,580,557 3,721,007 3,831,283 3,862,350 3.804 5423 Biosolids Management 554,053 587,180 779,572 783,821 679,240 -12.874 5425 Lift Stations 87,547 133,453 184,859 184,859 127,799 -30.874 5427 Collection Systems 898,399 736,302 837,224 931,145 753,166 -10.044 5431 Public Works Capital 548,563 386,226 3,484,804 4,167,736 2,235,551 -35.856 5432 Utility Capital 131,705 82,441 4,081,500 4,321,961 3,364,250 -17.576 Total Program Expenses \$11,196,958 \$10,465,485 \$18,625,113 \$19,758,841 \$16,340,876 -12.266 Expenses Comprised Of: - - - - - - -46,845 \$18,625,113 \$19,75	Р							
5422 Treatment 3,501,993 3,580,557 3,721,007 3,831,283 3,862,350 3.805 5423 Biosolids Management 554,053 587,180 779,572 783,821 679,240 -12.876 5425 Lift Stations 87,547 133,453 184,859 184,859 127,799 -30.876 5427 Collection Systems 898,399 736,302 837,224 931,145 753,166 -10.046 5431 Public Works Capital 548,563 386,226 3,484,804 4,167,736 2,235,551 -35.856 5432 Utility Capital 131,705 82,441 4,081,500 4,321,961 3,364,250 -17.576 Total Program Expenses \$11,196,958 \$10,465,485 \$18,625,113 \$19,758,841 \$16,340,876 -12.266 Expenses Comprised Of: -	5411	Utility Administration	741,943	249,548	264,520	266,409	288,644	9.12%
5423 Biosolids Management 554,053 587,180 779,572 783,821 679,240 -12.876 5425 Lift Stations 87,547 133,453 184,859 184,859 127,799 -30.876 5427 Collection Systems 898,399 736,302 837,224 931,145 753,166 -10.046 5431 Public Works Capital 548,563 386,226 3,484,804 4,167,736 2,235,551 -35.856 5432 Utility Capital 131,705 82,441 4,081,500 4,321,961 3,364,250 -17.576 Total Program Expenses \$ 11,196,958 \$ 10,465,485 \$ 18,625,113 \$ 19,758,841 \$ 16,340,876 -12.266 Expenses Comprised Of:	5412	Finance Administration	4,732,755	4,709,778	5,271,627	5,271,627	5,029,876	-4.59%
5425 Lift Stations 87,547 133,453 184,859 184,859 127,799 -30.876 5427 Collection Systems 898,399 736,302 837,224 931,145 753,166 -10.046 5431 Public Works Capital 548,563 386,226 3,484,804 4,167,736 2,235,551 -35.856 5432 Utility Capital 131,705 82,441 4,081,500 4,321,961 3,364,250 -17.576 Total Program Expenses \$ 11,196,958 \$ 10,465,485 \$ 18,625,113 \$ 19,758,841 \$ 16,340,876 -12.266 Expenses Comprised Of: - <	5422	Treatment	3,501,993	3,580,557	3,721,007	3,831,283	3,862,350	3.80%
5427 Collection Systems 898,399 736,302 837,224 931,145 753,166 -10.044 5431 Public Works Capital 548,563 386,226 3,484,804 4,167,736 2,235,551 -35.856 5432 Utility Capital 131,705 82,441 4,081,500 4,321,961 3,364,250 -17.576 Total Program Expenses \$ 11,196,958 \$ 10,465,485 \$ 18,625,113 \$ 19,758,841 \$ 16,340,876 -12.266 Expenses Comprised Of: Personnel 2,121,562 2,512,687 2,514,892 2,524,598 2,594,783 3.186 Administrative Expense 5,025,608 4,281,424 5,036,522 5,036,522 4,792,672 -4.844 Supplies & Materials 366,776 396,408 460,805 460,805 584,550 26.856 Purchased Services 2,568,334 1,659,757 4,376,510 4,646,300 2,297,885 -47.506 Utilities 1,109,060 1,041,989 1,093,031 1,089,815 -0.296 Repair & Maintenance <td< td=""><td>5423</td><td>Biosolids Management</td><td>554,053</td><td>587,180</td><td>779,572</td><td>783,821</td><td>679,240</td><td>-12.87%</td></td<>	5423	Biosolids Management	554,053	587,180	779,572	783,821	679,240	-12.87%
5431 Public Works Capital 548,563 386,226 3,484,804 4,167,736 2,235,551 -35.856 5432 Utility Capital 131,705 82,441 4,081,500 4,321,961 3,364,250 -17.576 Total Program Expenses \$ 11,196,958 \$ 10,465,485 \$ 18,625,113 \$ 19,758,841 \$ 16,340,876 -12.266 Expenses Comprised Of: Personnel 2,121,562 2,512,687 2,514,892 2,524,598 2,594,783 3.186 Administrative Expense 5,025,608 4,281,424 5,036,522 5,036,522 4,792,672 -4.844 Supplies & Materials 366,776 396,408 460,805 460,805 584,550 26.856 Purchased Services 2,568,334 1,659,757 4,376,510 4,646,300 2,297,885 -47.506 Utilities 1,109,060 1,041,989 1,093,031 1,089,815 -0.296 Repair & Maintenance 759,752 703,223 697,448 697,448 677,095 -2.926 Capital Expenditures (754,134)	5425	Lift Stations	87,547	133,453	184,859	184,859	127,799	-30.87%
5432 Utility Capital 131,705 82,441 4,081,500 4,321,961 3,364,250 -17.576 Total Program Expenses \$ 11,196,958 \$ 10,465,485 \$ 18,625,113 \$ 19,758,841 \$ 16,340,876 -12.266 Expenses Comprised Of: Personnel 2,121,562 2,512,687 2,514,892 2,524,598 2,594,783 3.186 Administrative Expense 5,025,608 4,281,424 5,036,522 5,036,522 4,792,672 -4.844 Supplies & Materials 366,776 396,408 460,805 460,805 584,550 26.857 Purchased Services 2,568,334 1,659,757 4,376,510 4,646,300 2,297,885 -47.506 Utilities 1,109,060 1,041,989 1,093,031 1,089,815 -0.296 Repair & Maintenance 759,752 703,223 697,448 697,448 677,095 -2.926 Capital Expenditures (754,134) (130,003) 4,445,905 5,300,137 4,304,076 -3.196	5427	Collection Systems	898,399	736,302	837,224	931,145	753,166	-10.04%
Total Program Expenses \$ 11,196,958 \$ 10,465,485 \$ 18,625,113 \$ 19,758,841 \$ 16,340,876 -12,266 Expenses Comprised Of: Personnel 2,121,562 2,512,687 2,514,892 2,524,598 2,594,783 3.186 Administrative Expense 5,025,608 4,281,424 5,036,522 5,036,522 4,792,672 -4.846 Supplies & Materials 366,776 396,408 460,805 460,805 584,550 26.856 Purchased Services 2,568,334 1,659,757 4,376,510 4,646,300 2,297,885 -47.506 Utilities 1,109,060 1,041,989 1,093,031 1,089,815 -0.296 Repair & Maintenance 759,752 703,223 697,448 697,448 677,095 -2.926 Capital Expenditures (754,134) (130,003) 4,445,905 5,300,137 4,304,076 -3.196	5431	Public Works Capital	548,563	386,226	3,484,804	4,167,736	2,235,551	-35.85%
Expenses Comprised Of: Personnel 2,121,562 2,512,687 2,514,892 2,524,598 2,594,783 3.186 Administrative Expense 5,025,608 4,281,424 5,036,522 5,036,522 4,792,672 -4.846 Supplies & Materials 366,776 396,408 460,805 460,805 584,550 26.856 Purchased Services 2,568,334 1,659,757 4,376,510 4,646,300 2,297,885 -47.506 Utilities 1,109,060 1,041,989 1,093,031 1,089,815 -0.296 Repair & Maintenance 759,752 703,223 697,448 697,448 677,095 -2.926 Capital Expenditures (754,134) (130,003) 4,445,905 5,300,137 4,304,076 -3.196	5432	Utility Capital	131,705	82,441	4,081,500	4,321,961	3,364,250	-17.57%
Personnel 2,121,562 2,512,687 2,514,892 2,524,598 2,594,783 3.186 Administrative Expense 5,025,608 4,281,424 5,036,522 5,036,522 4,792,672 -4.846 Supplies & Materials 366,776 396,408 460,805 460,805 584,550 26.856 Purchased Services 2,568,334 1,659,757 4,376,510 4,646,300 2,297,885 -47.506 Utilities 1,109,060 1,041,989 1,093,031 1,089,815 -0.296 Repair & Maintenance 759,752 703,223 697,448 697,448 677,095 -2.926 Capital Expenditures (754,134) (130,003) 4,445,905 5,300,137 4,304,076 -3.196	Tota	I Program Expenses	\$ 11,196,958	\$ 10,465,485	\$ 18,625,113	\$ 19,758,841	\$ 16,340,876	-12.26%
Administrative Expense 5,025,608 4,281,424 5,036,522 5,036,522 4,792,672 -4.844 Supplies & Materials 366,776 396,408 460,805 460,805 584,550 26.856 Purchased Services 2,568,334 1,659,757 4,376,510 4,646,300 2,297,885 -47.506 Utilities 1,109,060 1,041,989 1,093,031 1,089,815 -0.296 Repair & Maintenance 759,752 703,223 697,448 697,448 677,095 -2.926 Capital Expenditures (754,134) (130,003) 4,445,905 5,300,137 4,304,076 -3.196	Expens	ses Comprised Of:						
Supplies & Materials 366,776 396,408 460,805 460,805 584,550 26.856 Purchased Services 2,568,334 1,659,757 4,376,510 4,646,300 2,297,885 -47.500 Utilities 1,109,060 1,041,989 1,093,031 1,093,031 1,089,815 -0.296 Repair & Maintenance 759,752 703,223 697,448 697,448 677,095 -2.926 Capital Expenditures (754,134) (130,003) 4,445,905 5,300,137 4,304,076 -3.196	Personr	nel	2,121,562	2,512,687	2,514,892	2,524,598	2,594,783	3.18%
Purchased Services 2,568,334 1,659,757 4,376,510 4,646,300 2,297,885 -47.50° Utilities 1,109,060 1,041,989 1,093,031 1,093,031 1,089,815 -0.29° Repair & Maintenance 759,752 703,223 697,448 697,448 677,095 -2.92° Capital Expenditures (754,134) (130,003) 4,445,905 5,300,137 4,304,076 -3.19° Full Time Equivalent Staff: Equivalent Staff	Adminis	strative Expense	5,025,608	4,281,424	5,036,522	5,036,522	4,792,672	-4.84%
Utilities 1,109,060 1,041,989 1,093,031 1,093,031 1,089,815 -0.296 Repair & Maintenance 759,752 703,223 697,448 697,448 677,095 -2.926 Capital Expenditures (754,134) (130,003) 4,445,905 5,300,137 4,304,076 -3.196 Full Time Equivalent Staff:	Supplie	s & Materials	366,776	396,408	460,805	460,805	584,550	26.85%
Repair & Maintenance 759,752 703,223 697,448 697,448 677,095 -2.925 Capital Expenditures (754,134) (130,003) 4,445,905 5,300,137 4,304,076 -3.195 Full Time Equivalent Staff:	Purchas	sed Services	2,568,334	1,659,757	4,376,510	4,646,300	2,297,885	-47.50%
Capital Expenditures (754,134) (130,003) 4,445,905 5,300,137 4,304,076 -3.199 Full Time Equivalent Staff:	Utilities		1,109,060	1,041,989	1,093,031	1,093,031	1,089,815	-0.29%
Full Time Equivalent Staff:	Repair a	& Maintenance	759,752	703,223	697,448	697,448	677,095	-2.92%
	Capital	Expenditures	(754,134)	(130,003)	4,445,905	5,300,137	4,304,076	-3.19%
	Full Tin	ne Equivalent Staff:						
Personner anocated to programs 20.71 26.39 28.41 28.41 28.41 28.71	Personr	nel allocated to programs	28.71	28.39	28.41	28.41	28.71	

* % change from prior year adopted budget

Utility Administration

Business Unit 5411

PROGRAM MISSION

For the benefit of the Wastewater Utility staff, managers will administer the Wastewater facility, while supporting and mentoring operations, biosolids, laboratory, and maintenance staff to ensure that all administrative business functions are completed accurately, timely, and professionally.

Link to City Key Strategies:

PROGRAM NARRATIVE

Implements Key Strategies # 4: "Continually assess trends affecting the community and proactively respond", and # 6: "Create opportunities and learn from successes and failures".

Objectives:

Continue to comply with all statutory requirements, filing all reports accurately and on a timely basis Continue to provide support in developing capital improvement projects, budgets, and process analysis Identify cost efficient technologies to assist in taking a proactive approach to administration Maintain a safe and healthy work environment for divisional employees Provide leadership in the coordination of community relations

Major changes in Revenue, Expenditures or Programs:

As part of the ERP (Enterprise Resource Planning) project the Laboratory & Pretreatment business unit (5424) was combined with the Treatment business unit (5422). Revenue and lab license fees that were previously recorded in the business unit and have been consolidated into the Administration business unit.

Special Hauled Waste revenue reflects a 3% rate increase that is effective January 1, 2018, was approved July 2017.

	Actual 2015	Actual 2016	Target 2017	Projected 2017	Target 2018
Client Benefits/Impacts					
Safe work environment					
# of workers comp. claims / year	0	2	0	0	(
# of first aid entries per year	13	10	0	0	(
Strategic Outcomes					
Effective use of budgeted funds					
% of operational budget obligated	88%	93%	100%	100%	100
Trained Staff				,	
% of staff adequately trained	74%	95%	100%	100%	100
Average # of hours training	11/0	00/0	10070	10070	
per employee	16	11	25	25	2
					-
Work Process Outputs					
Government reports prepared					
# reports filed:					
Compliance Report (eCMAR)	1	1	1	1	
Biosolids Annual Report	1	1	1	1	
Pretreatm't Report	2	2	2	2	
Discharge Report (eDMR)	12	12	12	12	1

Utility Administration

Business Unit 5411

PROGRAM BUDGET SUMMARY

		Ac	tual		Budget					
Description		2015		2016	Ac	dopted 2017	An	nended 2017		2018
Revenues										
4710 Interest on Investments	\$	180,452	\$	142,454	\$	350,000	\$	350,000	\$	250,000
4730 Interest - Deferred Specials		20,275	·	14,688	·	20,000	Ċ	20,000		10,000
4801 Charges for Service - Nontax		834		· -		, –				, -
4810 Sewer Service - Residential		3,953,505		3,946,452		3,933,000		3,933,000		3,930,000
4811 Sewer Service - Commercial		936,935		957,745		930,000		930,000		960,000
4812 Sewer Service - Industrial		4,147,099		3,853,500		4,215,000		4,215,000		3,780,000
4813 Sewer Service - Municipal		272,186		281,297		275,000		275,000		275,000
4814 Industrial Pre-Treatment		5,242		5,828		5,000		5,000		5,000
4815 Sewer Service - Multi-Family		302,454		313,250		305,000		305,000		330,000
5001 Fees & Commissions		7,370		7,131		7,500		7,500		7,500
5005 Sale of City Property - Tax		3,634		190		-		-		-
5010 Misc. Revenue - Nontax		8,604		10,142		6,000		6,000		8,000
5011 Misc. Revenue - Tax		8,147		2,848		-		-		3,000
5021 Capital Contributions		608,884		292,031		-		-		156,550
5035 Other Reimbursements		1,717		2,420		1,800		1,800		2,500
5071 Customer Penalty		38,613		39,109		39,000		39,000		39,000
5084 Special Hauled Waste		1,463,154		2,161,440		1,500,000		1,500,000		1,750,000
Total Revenue	\$	11,959,105	\$	12,030,525	\$	11,587,300	\$	11,587,300	\$	11,506,550
E verage										
Expenses 6101 Regular Salaries	\$	126.069	\$	143,558	\$	150 455	ድ	152,100	¢	161 600
6104 Call Time	φ	136,068 13	φ	143,000	φ	150,455	\$	152,100	\$	161,602
6105 Overtime		105		329		2,327		- 2,327		2,393
6108 Part-Time		5,726		1,663		1,472		1,472		2,393
6150 Fringes		40,825		45,318		47,811		48,055		53,320
6201 Training\Conferences		40,825		9,000		7,780		7,780		7,500
6301 Office Supplies		3,712		9,000 2,773		3,000		3,000		3,000
6302 Subscriptions		5,712		2,773		3,000		3,000		100
6303 Memberships & Licenses		2,858		2,139		4,055		4,055		7.040
6304 Postage\Freight		2,858		2,139		,		2,500		2,500
6305 Awards & Recognition		5,160		350		2,500 300		2,500		2,500
6306 Janitorial Supplies		6,540		5,929		7,000		7,000		6,500
6307 Food & Provisions		601		400		400		400		400
6320 Printing & Reproduction		1,909		2,845		3,000		3,000		3,000
6321 Clothing		584		2,045		5,000		3,000		3,000
6323 Safety Supplies		8,493		6,990		5,500		5,500		5,500
6327 Misc. Equipment		889		4,309		1,000		1,000		5,000
6407 Collection Services		3.350		2,965		3,400		3,400		3,750
6408 Contractor Fees		3,555		1,814		3,400		3,750		3,750
6411 Temporary Help		276		1,014		5,750		5,750		5,750
6412 Advertising/Publications		2,494		56		1,500		1,500		1,500
6413 Utilities		13,428		14,683		16,380		16,380		15,920
6418 Equipment Repairs & Maint		232		47		10,000		10,000		13,320
6425 CEA Equip. Rental		2,798		3,386		2,790		2,790		3,207
7915 Trans Out - Stormwater		2,790		3,300		2,790		2,790		5,207
Total Expense	\$	741,943	\$	249,548	\$	264,520	\$	266,409	\$	288,644
	Ψ	711,040	Ψ	210,040	Ψ	207,020	Ψ	200,400	Ψ	200,044

DETAILED SUMMARY OF 2018 PROPOSED EXPENDITURES > \$15,000

None

Finance Administration

Business Unit 5412

PROGRAM MISSION

Customer billing and financial system maintenance to be in compliance with generally accepted accounting principles (GAAP).

Link to City Goals:

PROGRAM NARRATIVE

Implements Key Strategies # 2: "Encourage active community participation and involvement", # 4: "Continually assess trends affecting the community and proactively respond", and # 6: "Create opportunities and learn from successes and failures".

Objectives:

Administrative overhead costs such as interest, depreciation, insurance and other miscellaneous expenses are accounted for in this program.

Major changes in Revenue, Expenditures or Programs:

Meter expense is increasing due to the replacement of the Badger radio read system. The new Sensus meter system value is more than the system that it is replacing, thus increasing the allocation of meter related costs to the Wastewater Utility from the Water Utility. The Wastewater Utility shares the expense of meters because the billing consumption for sewer service is also calculated using the meter system.

The Insurance increase in 2017 and 2018 is due to the allocation of costs related to the Fox River PCB cleanup litigation (not covered by the City's insurance carrier) to the Wastewater Utility and to a surcharge to all departments to address the deficit fund balance in the Risk Management fund arising from several years of unusually high workers' compensation costs. Since the Fox River cleanup litigation has been resolved (please refer to the Risk Management budget), we expect costs related to it to taper off.

PERFORMANCE INDICATORS												
Actual 2015	Actual 2016	Target 2017	Projected 2017	Target 2018								
expenses												
50%	75%	92%	83%	92%								
0	0	0	0	(
113 384	113 932	114 000	114 000	114,000								
	,	.,	,	.,								
	Actual 2015 expenses 50%	Actual 2015 Actual 2016 expenses 50% 75% 0 0 0	Actual 2015 Actual 2016 Target 2017 expenses 50% 75% 92% 0 0 0 0	Actual 2015 Actual 2016 Target 2017 Projected 2017 expenses 50% 75% 92% 83% 0 0 0 0 0								

Finance Administration

Business Unit 5412

PROGRAM BUDGET SUMMARY

		Act	ual					Budget		
Description		2015		2016	A	dopted 2017	An	nended 2017		2018
Revenues										
5006 Gain (Loss) on Asset Disp.	\$	(31,185)	\$	(57,030)	\$	-	\$	-	\$	-
5086 Premium on Debt Issue		19,438		18,773		18,053		18,053		17,256
	\$	(11,747)	\$	(38,257)	\$	18,053	\$	18,053	\$	17,256
Expenses										
6101 Regular Salaries	\$	103.820	\$	105.081	\$	114,448	\$	114,448	\$	114,040
6105 Overtime	·	318	·	298	·	-	Ċ	-	Ċ	-
6150 Fringes		28,614		249,399		43,417		43,417		48,589
6304 Postage\Freight		20,566		18,248		22,000		22,000		24,000
6320 Printing & Reproduction		3,030		2,392		3,300		3,300		3,300
6401 Accounting/Audit		11,317		11,140		12,020		12,020		9,360
6403 Bank Services		20,972		20,170		21,500		21,500		21,500
6437 Billing Services		60,290		61,721		66,800		66,800		69,000
6501 Insurance		127,697		137,808		265,980		265,980		265,812
6599 Other Contracts/Obligations		228		-		-		-		-
6601 Depreciation Expense		3,248,192		2,928,395		3,395,000		3,395,000		3,200,000
6623 Uncollectable Accounts		3,140		2,165		5,500		5,500		4,500
6631 Meter Expense		437,434		514,361		650,199		650,199		630,000
6720 Interest Payments		549,687		541,150		554,013		554,013		522,325
7911 Trans Out - General Fund		117,450		117,450		117,450		117,450		117,450
Total Expense	\$	4,732,755	\$	4,709,778	\$	5,271,627	\$	5,271,627	\$	5,029,876

Postage/Freight City Service Invoice postage City Service Invoice folding/inserting	Meter Expense\$ 22,500Allocation from Water1,500Meter depreciation\$ 24,000Meter payment in lieu of tax	\$ 108,500 230,000 69,000
Bank Services Banking & Investment Fees	Return on investment in net fixed assets - meters \$ 21,500 \$ 21,500	222,500 \$ 630,000
Billing Services Sewer charges from other sanitation districts for Appleton residences served	\$ 69,000 \$ 69,000	

Treatment

Business Unit 5422

PROGRAM MISSION

For the benefit of the community, we will provide essential services to process wastewater so that an effluent suitable for discharge to the Fox River and a biosolids component suitable for agriculture beneficial reuse is achieved.

PROGRAM NARRATIVE

Link to City Key Strategies:

Implements Key Strategies # 4: "Continually assess trends affecting the community and proactively respond", and # 6: "Create opportunities and learn from successes and failures".

Objectives:

Meet or exceed all State and federal regulatory agency requirements Monitor and evaluate all operating systems to ensure the most efficient and cost-effective treatment methods are being applied to current operations, and to support future special revenue programs Maintain an effective relationship with all City departments, public officials, and the community

Major changes in Revenue, Expenditures or Programs:

The AWWTP was reissued a WPDES permit with an effective start date of April 1, 2017. The 2018 treatment budget reflects the purchase of additional iron salts (ferric chloride) to facilitate ongoing full-scale treatment evaluations under higher chemical dosage regimens to determine the ability to consistently and reliably achieve low-level phosphorus criteria established by TMDL legislation and Wisconsin Administrative Code NR 217.

As part of the ERP (Enterprise Resource Planning) project the Laboratory & Pretreatment business unit (5424) was combined with the Treatment business unit (5422). Repair parts expense reflects the costs for parts and material used to repair and maintain equipment by staff; the expense for parts was previously included in the budget in the equipment repair and maintenance line item. The lab fees expense was previously part of the contractor fees budget.

Overtime budget reflects an increase to allow for 15 minutes of overtime at each shift change to allow for communication between staff.

		ICE INDICATO			
	Actual 2015	Actual 2016	Target 2017	Projected 2017	Target 2018
Client Benefits/Impacts					
Environmental Safety					
# of Discharge Monthly Report (DMR)					
permit exceedance/violations	0	0	0	0	
Essential services provided					
# of gallons influent treated per year	4,228 MG	4,694 MG	4,500 MG	4,500 MG	4,500 MG
Environmental safety					
# of industrial clients	10	10	10	10	10
# of clients in significant					
non-compliance	0	0	0	0	C
Increase revenue sources					
\$ received from other sources	\$ 1,473,124	\$ 2,161,440	\$ 750,000		\$ 1,750,000
# of tons of hauled waste received	-	-	205,000	270,000	205,000
Strategic Outcomes					
High Wastewater treatment standards					
CMAR Grade for ten categories	А	А	А	А	A
Overall CMAR GPA	3.73	3.73	4.00		4.00
# of categorical grades of C or below	0.70	0.70	4.00	••	4.00
Public Outreach Initiatives	v	v	v		`
# of pollution minimization initiatives	4	4	4	4	
Work Process Outputs					
Efficient plant operation					
Average # of days to close preventive					
work orders	59	59	35	36	36
Record maintenance - Discharge Monitori	ng Report (DMP	i)			
# DMR - QA/QC samples completed	9,936	10,747	6,125	10,775	10,775
Improve treatment processes					
# process samples analyzed per yr*	4,632	4,346	4,900	4,500	4,500
Maintain industrial pretreatment compliance	ce				
# of inspections	10	10	10	10	1(
# of sampling events	20	20	20	20	20
# of billable samples for other					
City departments	572	503	550	350	35
* includes all compliance, process and b	oilling samples				

Treatment

Business Unit 5422

PROGRAM BUDGET SUMMARY

	Actual				Budget					
Description		2015		2016	Ad	opted 2017	Am	ended 2017		2018
Expenses 6101 Regular Salaries 6104 Call Time 6105 Overtime 6108 Part-Time	\$	884,544 1,613 54,349 7,530	\$	983,893 2,527 60,303 7,632	\$	997,469 3,061 63,577 9,082	\$	1,003,281 3,061 63,577 9,082	\$	994,788 3,106 74,612 9,398
6150 Fringes 6309 Shop Supplies & Tools 6310 Chemicals 6321 Clothing 6322 Gas Purchases 6324 Medical / Lab Supplies 6326 Repair Parts		332,515 28,068 251,624 5,264 6,247 20,578		388,175 32,384 230,936 5,185 5,766 20,239		374,821 42,500 315,000 5,905 8,000 20,000		375,685 42,500 315,000 5,905 8,000 20,000		408,640 28,000 335,000 5,500 8,250 21,000 110,000
6327 Miscellaneous Equipment 6402 Legal Fees 6404 Consulting Services 6408 Contractor Fees 6413 Utilities 6415 Tipping Fees 6416 Building Repairs & Maint.		11,261 28,931 40,257 117,475 1,050,726 3,292		47,711 26,729 5,750 180,054 978,123 2,761		13,200 29,700 80,000 124,900 1,026,915 3,500		13,200 29,700 180,000 128,500 1,026,915 3,500		24,000 29,250 38,000 169,750 1,021,915 3,500 35,000
6418 Equipment Repairs & Maint 6420 Facilities Charges 6424 Software Support 6425 CEA Equip. Rental 6432 Lab Fees 6440 Snow Removal Services 6454 Grounds Repair & Maint 6599 Other Contracts/Obligations		169,073 468,466 16,460 18,731 1,114 3,401 9,343 8,681		203,138 379,065 12,977 18,448 1,139 2,950 5,286 7,211		102,000 448,221 14,300 16,916 2,000 3,500 7,500 8,940		102,000 448,221 14,300 16,916 2,000 3,500 7,500 8,940		30,500 446,045 14,300 19,821 15,000 3,500 7,500 5,975
6899 Other Capital Outlay Total Expense	\$	(37,550) 3,501,993	\$	(27,825) 3,580,557	\$	3,721,007	\$	3,831,283	\$	3,862,350
DETAILED SUMMARY OF 2018 PROPO	SED	• •	UR				*			
					-					
Legal Fees DNR Fees	\$ \$	29,250 29,250	lr C B	<u>emicals</u> on salts OAF polymer BFP coagulan			\$	120,000 25,000 120,000		
<u>Contractor Fees</u> Cogen maintenance Pipe insulation replacement Painting of process piping Well abandonment	\$	3,000 7,500 30,000 5.000	S	Sodium hypoc Sodium bisulfi Other chemica	te	rite	\$	32,000 32,000 6,000 335,000		
Struvite removal Grit removal Safety inspections Lab equipment inspections DAF component replacement	\$	10,000 3,250 8,000 3,000 100,000 169,750	Ċ	uipment Rep Compressor re ab equipmer Generator ma Repair service	epa it re inte	irs pairs nance	nce \$ \$	2,500 1,500 1,500 25,000 30,500		
<u>Consulting Services</u> Filtrate line review Air compressor study Concrete repairs on tanks Miscellaneous engineering studies	\$	15,000 7,500 8,000 7,500 38,000		op Supplies & Shop supplies Batteries Supply bin pat Small hand to	rts	ools	\$	5,000 2,000 15,000 6,000 28,000		
Repair Parts Pumps & Motors Valves, piping and bearings Inventory management	\$	50,000 40,000 20,000 110,000	S F	scellaneous E CADA comp ladar level in ab equipmer	one stru	nts	\$	2,000 13,000 9,000 24,000		
Building Repairs & Maintenance Receiving Station concrete	\$ \$	35,000 35,000	-							

Biosolids Management

Business Unit 5423

PROGRAM MISSION

For the benefit of the ratepayers and the agricultural community, we will research and implement cost-effective recycling so that we accomplish beneficial reuse of biosolids produced during wastewater treatment.

Link to City Key Strategies:

PROGRAM NARRATIVE

Implements Key Strategy # 2: "Encourage active community participation and involvement".

Objectives:

The Biosolids Management Program implements storage and final disposition strategies for the biosolids produced in the wastewater treatment process. Program implementation must meet all State and federal standards applicable to the generation and beneficial use of municipal treatment plant biosolids. In addition to regulatory compliance, the program relies on a strong interface with regional authorities and the agricultural community to facilitate land application and composting of biosolids for beneficial use.

Major changes in Revenue, Expenditures or Programs:

The CIP to evaluate the feasibility of local composting of biosolids with leaves and ground brush was completed in 2012. The goal of the project, now transitioned to program, is to diversify the current biosolids management program by creating a cost effective and sustainable alternative beneficial use that complements traditional agricultural land application. A reliable compost outlet would alleviate AWWTP 180-day storage deficiencies by allowing for off-site storage through compost processing. Viable markets remain a primary focus as compost use demonstration projects are pursued to establish a baseline for compost demand. Other objectives include marketing the program and educating the general public within the greater Fox Cities region. This information is pivotal to determine future program viability. On April 1, 2017 the Biosolids Composting Facility was permitted as part of the AWWTP's Wisconsin Pollutant Discharge Elimination System (WPDES) permit. The AWWTP will now formally be able to recognize the compost processing facility located at the Outgagmie County Landfill as part of the 180-day biosolids storage requirement. The current compost facility lease with Outagamie County expires in April 2022 which parallels the WPDES permit term.

The increase in contractor fees are reflective of the increase in the contracted biosolids hauling rates beginning in 2018. The budget also reflects additional land application costs resulting from the escalation in biosolids production observed since 2015.

Miscellaneous equipment expense is to purchase compost covers. Lab Fee expense for testing of biosolids, compost and soils was previously part of the Laboratory & Pretreatment business unit and is now included in the Biosolids business unit.

		<u>CE INDICATOR</u>	-		
	<u>Actual 2015</u>	Actual 2016	<u>Target 2017</u>	Projected 2017	<u>Target 2018</u>
Client Benefits/Impacts					
Environmental Safety					
Biosolids Applications # of sites					
with nitrogen loading exceedances	0	0	0	0	0
with metal(s) loading exceedances	0	0	0		0
Strategic Outcomes					
Beneficial Re-use					
Wet tons applied	20,936	22,444	23,000	21,750	23,000
Wet tons landfilled	0	, 0	0	0	0
Wet tons composted	2,496	2,246	2,500	1,250	3,750
Work Process Outputs					
Biosolids production and storage					
Tons of biosolids produced	25,176	25,292	26,000	23,000	26.000
CMAR Compliance	20,170	_0,_0L	20,000	_0,000	20,000
# of site monitorings completed	49	42	24	24	40
		74	2 7	L T	40

Biosolids Management

Business Unit 5423

PROGRAM BUDGET SUMMARY

	Actual					Budget						
Description		2015		2016	Ad	opted 2017	Ame	nded 2017		2018		
Expenses												
6101 Regular Salaries	\$	63,558	\$	71,044	\$	70,355	\$	71,079	\$	71,548		
6104 Call Time		155		239		-		-				
6105 Overtime		1,648		1,941		2,573		2,573		2,598		
6108 Part Time		634		531		-		-				
6150 Fringes		24,297		28,943		25,430		25,538		26,842		
6316 Other Misc Supplies		-		-		-		-		1,000		
6322 Gas Purchases		1,939		2,593		2,150		2,150		150		
6327 Miscellaneous Equipment		167		306		-		-		10,000		
6404 Consulting Services		-		12,633		100,000		103,417				
6408 Contractor Fees		422,200		413,821		516,500		516,500		480,000		
6413 Utilities		313		309		450		450		450		
6416 Building Repair & Maint		-		-		-		-		10,000		
6425 CEA Equip. Rental		17,321		16,842		17,114		17,114		18,602		
6432 Lab Fees		-		-		-		-		10,050		
6599 Other Contracts/Obligations		21,821		37,978		45,000		45,000		48,000		
Total Expense	\$	554,053	\$	587,180	\$	779,572	\$	783,821	\$	679,240		

Contractor Fees	
Compost pad processing	80,000
Biosolids transport / application	375,000
Biosolids incorporation	25,000
	\$ 480,000
Other Contracts/Obligations	
City staff hauling to compost site	\$ 19,000
City staff brush handling	21,000
Pad maintenance by City staff	8,000
	\$ 48,000

Business Unit 5425

Lift Stations

PROGRAM MISSION

For the benefit of the Appleton sewer consumers, we will operate, monitor, and maintain the lift stations throughout the City to ensure consistent and reliable conveyance of sewage to the wastewater treatment facility.

Link to City Key Strategies:

PROGRAM NARRATIVE

Implements Key Strategies # 4: "Continually assess trends affecting the community and proactively respond" and # 6: "Create opportunities and learn from successes and failures".

Objectives:

Convey the city's industrial, commercial, and residential wastewater that cannot flow by gravity to one of the 14 lift stations where sewage is pumped to the wastewater plant for processing.

Major changes in Revenue, Expenditures or Programs:

The new Spartan Drive lift station will be placed into service late in 2017.

The contractor fees budget is to complete an assessment of needs for the City's lift stations.

	Actual 2015	CE INDICATOR Actual 2016	Target 2017	Projected 2017	Target 2018
Client Benefits/Impacts Sewage bypasses / backups # per year attributed to lift stations	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>1arget 2017</u>	<u>Projected 2017</u>	<u>1arget 2016</u>
# per year allinduled to fill stations	0	0	0	0	0
Strategic Outcomes Integrity of lift stations maintained # of emergency calls required	11	10	15	15	5
0, 1					
Work Process Outputs Response to work orders					
# of preventive work orders	195	202	168	168	160
# of corrective work orders	15	21	50	50	50

Lift Stations

Business Unit 5425

PROGRAM BUDGET SUMMARY

	Ac	tual					Budget	
Description	 2015		2016	Ad	opted 2017	Am	ended 2017	2018
Expenses								
6101 Regular Salaries	\$ 22,217	\$	33,626	\$	23,575	\$	23,575	\$ 36,428
6104 Call Time	1,618		1,235		2,500		2,500	2,500
6105 Overtime	2,249		1,799		1,955		1,955	2,014
6108 Part Time	413		149		-		-	,
6150 Fringes	10,044		14,951		10,803		10,803	16,907
6327 Miscellaneous Equipment	1,300		17,606		18,000		18,000	1,600
6404 Consulting Services	-		-		2,500		2,500	5,000
6408 Contractor Fees	1,320		9,371		71,000		71,000	11,000
6413 Utilities	36,553		38,805		41,026		41,026	41,350
6418 Equip Repairs & Maint	9,964		15,613		13,500		13,500	11,000
6420 Facilities Charges	269		-		-		-	
6424 Software Support	1,600		-		-		-	-
6599 Other Contracts / Obligations	-		298		-		-	-
Total Expense	\$ 87,547	\$	133,453	\$	184,859	\$	184,859	\$ 127,799

Utility Capital Improvements

Business Unit 5432

PROGRAM MISSION

For the benefit of Appleton sewer consumers, we will provide necessary improvements to all wastewater facilities, structures, and equipment so that the treatment processes meet current and future needs in a cost-effective manner.

Link to City Key Strategies:

PROGRAM NARRATIVE

Implements Key Strategies # 4: "Continually assess trends affecting the community and proactively respond, and # 6: "Create opportunities and learn from successes and failures".

Obiectives:

Provide resources to upgrade existing plant components and facilities Identify and install new systems and equipment for improved treatment processes Correct safety hazards when identified

The following are 2018 CIPs:

	20	18 Budget	Page
Aeration Blower Replacement	\$	920,000	Projects, Pg. 643
Belt Filter Press upgrades		70,000	Projects, Pg. 644
Programmable Logic Controller and SCADA system maintenance		158,500	Projects, Pg. 646
Marshall Heights Lift Station upgrades		150,000	Projects, Pg. 645
Electrical Distribution System Replacement		1,470,750	Projects, Pg. 610
Landscaping		25,000	Projects, Pg. 612
Roadway Replacement		290,000	Projects, Pg. 613
S-building air handling unit upgrades		250,000	Projects, Pg. 614
H-building new water line		30,000	Projects, Pg. 618
-			
	\$	3,364,250	

Major changes in Revenue, Expenditures or Programs:

The budget for this program varies from year to year based on the capital needs of the utility.

Note for future capital planning:

In late 2015, the engineering firm CH2M provided the Utility Department recommendations that could achieve lower phosphorus and total suspended solids treatment limits resulting from Total Maximum Daily Load legislation. Treatment plant upgrades along with a matrix of off-site regulatory compliance options that include Water Quality Trading (WQT) and Adaptive Management (AM) were included as of the recommendations by CH2M. In a WQT program the Utility would purchase phosphorus credits from the agricultural community rather than constructing on-site treatment. Similarly, through AM the Utility would contract with agriculture to establish field practices that reduce phosphorus loading to the watershed. The structure for these "off-site" compliance alternatives remain undeveloped and will result in millions of dollars added to wastewater budgets over future permit cycles to evaluate and create mechanisms necessary for their success. In parallel with ongoing on-site treatment evaluation studies, the Appleton Wastewater Utility will explore AM and WQT opportunities to build experience of how these compliance options may function.

	PERFORMAN	CE INDICATOR	IS		
	Actual 2015	Actual 2016	Target 2017	Projected 2017	Target 2018
Client Benefits/Impacts					
Cost effective treatment processes					
# of CIP's in budget year	15	11	13	15	10
# of CIP's in five-year plan	19	24	21	23	18
Strategic Outcomes					
Sewer Rate changes					
% per year	0%	0%	0%	0%	0%
Work Process Outputs					
Project Management					
% of projects completed at year-end	67%	36%	100%	40%	100%

Utility Capital Improvements

Business Unit 5432

PROGRAM BUDGET SUMMARY

	Ac	tual					Budget	
Description	 2015		2016	Ac	dopted 2017	Arr	nended 2017	2018
Expenses								
6404 Consulting Services	\$ 91,470	\$	65,195	\$	426,500	\$	426,965	\$ 140,000
6408 Contractor Fees	1,195,190		441,129		2,500,000		2,568,696	920,000
6599 Other Contracts/Obligations	856		370		-		-	20,000
6801 Land	-		-		5,000		5,000	-
6802 Land Improvements	83,281		140,463		220,000		220,000	315,000
6803 Buildings	150,355		64,019		390,000		435,953	1,710,750
6804 Equipment	213,278		140,860		540,000		665,347	258,500
6809 Infrastructure Construction	4,806		-		-		-	-
6899 Other Capital Outlay	(1,607,531)		(769,595)		-		-	-
Total Expense	\$ 131,705	\$	82,441	\$	4,081,500	\$	4,321,961	\$ 3,364,250

<u>Consulting Services</u> Electrical distribution upgrades Belt filter press upgrades Marshall Heights lift station	\$	40,000 70,000 30,000 140,000	Land Improvements Roadway Replacement \$ 290,000 Landscaping 25,000 \$ 315,000
			Contractor Fees
Other Contracts/Obligations			Aeration blower replacement \$ 920,000
PLC and SCADA maintenance	\$	20,000	\$ 920,000
	\$	20,000	
Buildings			
H-building new water line	\$	30,000	
Electrical distribution upgrades	·	1,430,750	
S-building air handling units upgrades		250,000	
	\$	1,710,750	
Equipment			
	\$	120.000	
Marshall Heights lift station PLC and SCADA maintenance	Ф	120,000	
PLO and SOADA maintenance	_	138,500	
	_\$	258,500	

Collection Systems

Business Unit 5427

PROGRAM MISSION

Maintain the sanitary sewer system for the health and safety of the community.

Link to City Goals:

PROGRAM NARRATIVE

Implements Key Strategies # 1: "Prompt delivery of excellent services", # 2: "Encourage active community participation and involvement", # 4: "Continually assess trends affecting the community and proactively respond", # 6: "Create opportunities and learn from successes and failures", and # 7: "Communicate our success through stories and testimonials".

Objectives:

Complete the annual sewer cleaning program and identify those areas with improper connections and defects Reduce the amount of inflow and infiltration into the sanitary sewer system

Major changes in Revenue, Expenditures or Programs:

The fluctuation in contractor fees from year to year is the result of the root control program. Because the City does not have an extensive root problem, we are able to conduct this program every other year, which also results in better bid prices. The 2018 budget shows a reduction in contractor fees as a result.

Per the Sanitary Lateral Policy, \$10,000 has been added to consulting services to begin the lateral televising in advance of replacing them in 2019.

The amount budgeted in equipment repair and maintenance is to be used for preventive maintenance for the Rover X sewer camera to extend the life of the camera.

	PERFORMAN	CE INDICATOR	S		
	Actual 2015	Actual 2016	Target 2017	Projected 2017	Target 2018
Client Benefits/Impacts					
Benefit of inspection program					
# defects identified from TV report	3	34	25	25	22
Compliance with regulation					
# of protruding taps identified	0	9	6	6	5
# of cross connections identified	86	103	80	80	60
Strategic Outcomes					
Reliability of system maintenance program					
# of trouble calls	28	17	35	35	30
# of system blockages removed	3	1	5	5	4
% of total system televised	14.1%	14.2%	10.0%	10.0%	11.0%
Work Process Outputs					
Maintenance performed					
% of total system cleaned	47%	49%	48%	48%	48%
# of spot repairs made	46	0	23	23	23
Safeguarding health and safety	-	-	-	-	-
# of protruding taps removed	3	0	5	5	5
	_		-	_	-

Collection Systems

Business Unit 5427

PROGRAM BUDGET SUMMARY

	 Ac	tual					Budget	
Description	 2015		2016	A	dopted 2017	Am	ended 2017	2018
Revenues 4801 Charges for Serv Nontax 4908 Intergovernmental Charges 5035 Other Reimbursements	\$ 4,853 4,742 4,288	\$	5,859 4,669 2,800	\$	5,000 5,000	\$	5,000 5,000	\$ 6,000 5,000
Total Revenue	\$ 13,883	\$	13,328	\$	10,000	\$	10,000	\$ 11,000
Expenses 6101 Regular Salaries 6104 Call Time	\$ 269,130 1,574	\$	245,830 1,141	\$	271,270 1,500	\$	271,539 1,500	\$ 290,650 1,500
6105 Overtime 6108 Part-Time 6150 Fringes 6201 Training∖Conferences	5,418 - 92,162 -		3,973 973 91,107		4,200 484 105,808 1,000		4,200 484 105,848 1,000	4,200 - 108,421 1,000
6203 Memberships & Licenses 6305 Awards & Recognition 6309 Shop Supplies & Tools	245 2,573		175 245 2,390		245 3,000		245 3,000	245 2,500
6325 Construction Materials 6327 Miscellaneous Equipment 6404 Consulting Services 6408 Contractor Fees	5,653 17,040 276,494 178,905		9,086 5,042 244,927 62,188		16,000 4,250 184,000 161,000		16,000 4,250 194,612 244,000	16,000 4,750 164,000 66,000
6413 Utilities 6415 Tipping Fees 6418 Equipment Repairs & Maint	8,039 1,732 27		10,069 4,964		8,260 2,500		8,260 2,500	10,180 4,000 1,100
6424 Software Support 6425 CEA Equip. Rental 6599 Other Contracts/Obligations	1,249 44,217 6,941		2,357 46,064 5,771		2,150 65,557 6,000		2,150 65,557 6,000	2,150 70,470 6,000
6899 Other Capital Outlay Total Expense	\$ (13,000) 898,399	\$	- 736,302	\$	- 837,224	\$	- 931,145	\$ - 753,166

<u>Construction Materials</u> Castings Concrete Other Materials	\$ 7,500 6,300 2,200
	\$ 16,000
<u>Consulting Services</u> Sewer TV & cleaning Flow monitoring -	\$ 150,000
Kensington	4,000
Lateral Televising	10,000
	\$ 164,000
<u>Contractor Fees</u> Surface restoring -prior year repairs Spot repair liners Unanticipated failures Misc Fees	\$ 25,000 20,000 20,000 1,000 66,000

Public Works Capital Improvements

Business Unit 5431

PROGRAM MISSION

Identify, design, and implement the capital construction program to maintain and expand the sanitary sewer system for the benefit of current and future users of the system.

Link to City Goals:

PROGRAM NARRATIVE

Implements Key Strategies # 1: "Prompt delivery of excellent services", # 2: "Encourage active community participation and involvement", # 4: "Continually assess trends affecting the community and proactively respond", # 6: "Create opportunities and learn from successes and failures", and # 7: "Communicate our success through stories and testimonials".

Objectives:

Identify failing or improperly sized sewers and incorporate them into our five year plan Identify the need for future system expansions and incorporate them into our five year plan Design replacement systems or system expansions to meet current and future demands Reduce the amount of inflow and infiltration into the sanitary sewer system

The following are 2018 CIPs:

Sanitary Sewer Construction

2018 Budget	Page
\$ 2,235,551	Projects, Pg. 602

Major changes in Revenue, Expenditures or Programs:

No major change.

	Actual 2015	CE INDICATOR Actual 2016		Projected 2017	Target 2018
Client Benefits/Impacts					
Reduction of wastewater treatment cost					
# of manholes - rehab/rebuilt	23	34	25	25	25
Collection system rating from CMAR	Ā	A	A	Ā	
# of laterals replaced	106	134	200	200	200
Strategic Outcomes					
Improvements to the sanitary sewer system					
Total miles of sanitary sewer	323	325	324	324*	32
% of total miles of sanitary sewer	010	020	0-1	02.	
reconstructed	0.46%	0.60%	0.52%	0.52%	0.50%
Nork Process Outputs					
Restoration of sanitary sewers					
Miles of existing sanitary sewers					
reconstruction	1.47	1.95	1.70	1.70	1.84
	1.47	1.95	1.70	1.70	1.0
Expansion of sanitary sewer system	0.49	1.04	0.23	0.23	0.6
Miles of new sanitary sewer added Reduction of treatment costs	0.49	1.04	0.23	0.23	0.03
# of seals installed	94	94	100	100	10
# UI SEAIS IIISIAIIEU	94	94	100	100	10

Total Miles of sanitary sewer main decreased due to the City abandoning 2975 feet while installing only 494 feet of new sewer main.

Public Works Capital Improvements

Business Unit 5431

PROGRAM BUDGET SUMMARY

		Ac	tual					Budget		
Description		2015		2016	Ac	opted 2017	Am	nended 2017		2018
Expenses										
6101 Regular Salaries	\$	19.017	\$	11,856	\$	129,640	\$	129,640	\$	112,855
6104 Call Time	•	53	·	-	·	-	·	-	·	-
6105 Overtime		3,018		5,937		4,777		4,777		4,143
6108 Part-Time		1,017		474		3,110		3,110		2,854
6150 Fringes		7,301		8,750		48,972		48,972		38,473
6325 Construction Materials		159		484		-		-		-
6404 Consulting Services		65,621		36,175		-		-		50,000
6425 CEA Equip. Rental		-		-		7,400		7,400		7,400
6599 Other Contracts/Obligations		150		475		-		-		-
6801 Land		1,150		-		-		-		-
6809 Infrastructure Construction		653,438		1,483,486		3,290,905		3,973,837		2,019,826
6899 Other Capital Outlay		(202,361)		(1,161,411)		-		-		-
Total Expense	\$	548,563	\$	386,226	\$	3,484,804	\$	4,167,736	\$	2,235,551

Street		From	То	Waste- water Utility					
Labor Pool				158,32					
CEA				7,40					
Consultant	Lawe St - South Is	 sland St river crossi	ng force main	50,00					
	Subtotal			50,00					
Miscellaneous	Sanitary Laterals &	 & Manholes Prior To	o 2018 Asphalt	47,49					
Construction	Sanitary Laterals	Sanitary Laterals & Manholes Prior To 2018 Concrete							
	Structure Rehabili	tation / Sewer Cut r	epairs from 2017	40,00					
	Subtotal			120,14					
New Construction	Haymeadow Ave	Bluewater Way	Spartan Ave	107,35					
	Spartan Ave	Haymeadow Ave	e/o	101,70					
	Spartan Ave	Richmond St	Sommers Dr	203,40					
	Subtotal			412,45					
Reconstruction - liner	Calumet St	Lawe St	Carpenter St, 92' w/o	44,66					
	Easement - Outagamie and Highcrest	Cedar St	Reid Dr	17,13					
	Harris St	Douglas St	Douglas St, 332' e/o	13,28					
	Memorial Dr,	Ravinia PI, 304' n/o	Cherry Ct, 443' s/o	142,24					
	Spruce St	College Ave	Eighth St	29,68					
Reconstruction - other	Hammond Ave	Ballard Rd to the	east	65,00					
	Subtotal			311,99					
Reconstruction (on	Alvin St	Evergreen Dr	cds	39,02					
streets to be paved	Center St	North St	Atlantic St	92,32					
in 2019)	Evergreen Dr	Richmond St	Haymeadow Ave	25,00					
	Hall St	Woodland Ave	Grant St	63,59					
	Roosevelt St	Morrison St	Durkee St	84,32					
	Summit St	Spencer St	College Ave	129,10					
	Telulah Ave	Calumet St	John St	741,87					
	Subtotal			1,175,24					
Total			<u> </u>	\$ 2,235,55					

83500		City c	of Appleton				1
TEACHERA			Budget				09/28/17
BUD_WW_LN		Revenue and	Expense Summa	ary			09:44:32
				2017	2017	2018	2018
Description	2015 Actual	2016 Actual	2017 YTD Actual	Adopted Budget	Amended Budget	Requested Budget	Adopted Budget
REVENUES							
Interest Income	200,727	157,142	265,113	370,000	370,000	260,000	260,000
Charges for Services	9,309,725	9,038,994		9,353,000	9,353,000	8,945,000	8,945,000
Intergov. Charges for Service	4,742	4,670	297	5,000	5,000	5,000	5,000
Other Revenues	2,446,047	2,804,793	2,194,823	1,887,353	1,887,353	2,324,806	2,324,806
TOTAL REVENUES	11,961,241 =======	12,005,599 ======	8,711,473	11,615,353 =======			
EXPENSES BY LINE ITEM							
Regular Salaries	350,627	371,832	263,585	442,735	451,185	444,174	444,174
Labor Pool Allocations	983,966	1,046,972	784,054	1,303,787	1,303,787	1,327,157	1,327,157
Call Time	5,026	5,155	3,642	7,061	7,061	7,106	7,106
Overtime	67,103	74,580	58,875 0	79,409	79,409	89,960	89,960
Temp. Full-Time Part-Time	1,017 14,303	0 11,422	10,540	0 14,148	0 14,148	0 14,614	0 14,614
Other Compensation	7,803	6,830	5,680	8,265	8,265	8,155	8,155
Shift Differential	2,231	2,160	1,530	2,425	2,425	2,425	2,425
Sick Pay	8,605	9,581	3,602	0	0	0	0
Vacation Pay	145,122	157,513	112,052	0	0	0	0
Fringes Unemployment Compensation	543,679 505	619,098 136	442,319 0	657,062 0	658,318 0	701,192 0	701,192 0
Pension Expense / Revenue	8,425-		0	0	0	0	0
Salaries & Fringe Benefits	2,121,562	2,512,687	1,685,879	2,514,892	2,524,598	2,594,783	2,594,783
Training & Conferences	4,188	9,000	7,618	8,780	8,780	8,500	8,500
Office Supplies	3,712	2,773	1,190	3,000	3,000	3,000	3,000
Subscriptions	74	267	74	100	100	100	100
Memberships & Licenses	2,858	2,314	5,795	4,055	4,055	7,040	7,040
Postage & Freight Awards & Recognition	23,726 309	18,817 595	11,810 149	24,500 545	24,500 545	26,500 545	26,500 545
Building Maintenance/Janitor.		5,929	3,634	7,000	7,000	6,500	6,500
Food & Provisions	601	400	93	400	400	400	400
Insurance	127,697	137,808	199,484	265,980	265,980	0	265,812
	3,248,192	2,928,395	2,160,000	3,395,000	3,395,000	3,200,000	
Uncollectible Accounts Meter Expense	3,140 437,434	2,165 514,361	819 0	5,500	5,500	4,500 630,000	4,500 630,000
Interest Payments	549,687	541,150		554,013			522,325
Trans Out - General Fund	117,450		88,088	117,450		117,450	117,450
Trans Out - Wastewater	500,000	0	0	0	0	0	0
Administrative Expense	5,025,608	4,281,424		5,036,522	5,036,522	4,526,860	4,792,672
Shop Supplies & Tools	30,641	34,774	29,972	45,500	45,500	30,500	30,500
Chemicals	251,624	230,936	183,296	315,000	315,000	335,000	335,000
Miscellaneous Supplies	0	0	3,411	0	0	1,000	1,000
Printing & Reproduction Clothing	4,938 5,848	5,237 5,330	4,202 2,867	6,300 5,905	6,300 5,905	6,300 5,500	6,300 5,500
Gas Purchases	8,186	8,359		10,150	10,150		8,400
Safety Supplies	8,493	8,359 6,990	7,929	5,500	5,500	5,500	5,500
Medical & Lab Supplies	20,578	20,239	14,498 5,945	20,000	20,000	21,000 16,000	21,000
Construction Materials	5,812 0			16,000 0	16,000	16,000	
Vehicle & Equipment Parts Miscellaneous Equipment	30,656	0 74,974	2,928 36,196		0 36,450	110,000 45,350	110,000 45,350
Supplies & Materials	366,776	396,408	293,935	460,805	460,805	584,550	584,550
Accounting/Audit	11,317	11,140	0	12,020	12,020	9,360	9,360
Legal Fees	28,931	26,729	27,077	29,700	29,700	29,250	29,250
Bank Services	20,973	20,170		21,500	21,500	21,500	21,500
Consulting Services	473,843	364,681	258,981	793,000	907,494	397,000	397,000
Collection Services Contractor Fees	3,350 1,918,645	2,965 1,108,377	4,376 392,013	3,400 3,377,150	3,400 3,532,446	3,750 1,750,500	3,750 1,650,500
Temporary Help	1,918,645 276	1,108,377	392,013 434	3,377,150	3,532,446	0	
Advertising	2,494	56	0	1,500	1,500	1,500 7,500	1,500
Tipping Fees	5,024	7,725	5,597	6,000	6,000	.,	7,500
Lab Fees	1,114	1,139	6,676	2,000	2,000	25,050	25,050

City of Appleton 2018 Budget Revenue and Expense Summary

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Description	2015 Actual	2016 Actual	2017 YTD Actual	2017 Adopted Budget	2017 Amended Budget	2018 Requested Budget	2018 Adopted Budget
Billing Services	60,290	61,721	44,781	66,800	66,800	65,000	69,000
Snow Removal Services	3,401	2,950	2,108	3,500	3,500	3,500	3,500
Other Contracts/Obligations	38,676	52,104	31,597	59,940	59,940	79,975	79,975
Purchased Services	2,568,334	1,659,757	786,401	4,376,510	4,646,300	2,393,885	2,297,885
Electric	870,495	853,736	637,369	878,450	878,450	878,450	878,450
Gas	124,799	72,268	95,281	96,200	96,200	91,200	91,200
Water	67,481	67,993	42,367	69,100	69,100	71,000	71,000
Stormwater	32,237	32,679	15,745	32,241	32,241	32,565	32,565
Telephone	11,085	10,858	8,634	11,700	11,700	11,400	11,400
Cellular Telephone	2,963	4,455	2,860	5,340	5,340	5,200	5,200
Utilities	1,109,060	1,041,989	802,256	1,093,031	1,093,031	1,089,815	1,089,815
Building Repair & Maintenance	0	0	129	0	0	35,000	35,000
Vehicle Repair & Maintenance	0	0	0	0	0	10,000	10,000
Equipment Repair & Maintenanc	179,296	218,798	86,664	115,500	115,500	42,600	42,600
Facilities Charges	468,737	379,064	218,694	448,221	448,221	446,045	446,045
Software Support	19,309	15,334	10,430	16,450	16,450	16,450	16,450
CEA Equipment Rental	83,067	84,741	65,651	109,777	109,777	119,500	119,500
Grounds Repair & Maintenance	9,343	5,286	9,504	7,500	7,500	7,500	7,500
Repair & Maintenance	759,752	703,223	391,072	697,448	697,448	677,095	677,095
Land	1,150	0	0	5,000	5,000	0	0
Land Improvements	83,281	140,463	25,040	220,000	220,000	450,000	315,000
Buildings	150,355	64,019	55,557	390,000	435,953	1,710,750	1,710,750
Machinery & Equipment	213,278	140,860	123,597	540,000	665,347	488,500	258,500
Infrastructure Construction	658,244	1,483,486	2,271,231	3,290,905	3,973,837	2,019,826	2,019,826
Other Capital Outlay	1,860,442-	1,958,831-	0	0	0	0	0
Capital Expenditures	754,134-	130,003-	2,475,425	4,445,905	5,300,137	4,669,076	4,304,076
TOTAL EXPENSES	11,196,958	10,465,485	9,333,032	18,625,113	19,758,841	16,536,064	16,340,876

CITY OF APPLETON 2018 BUDGET WASTEWATER UTILITY STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS

Revenues	2015 Actual	2016 Actual	2017 Budget	2017 Projected	2018 Budget					
Charges for Services Miscellaneous Total Revenues	\$ 9,617,422 1,545,955 11,163,377	\$ 9,358,103 2,236,580 11,594,683	\$ 9,658,000 1,569,300 11,227,300	\$ 9,500,000 2,269,300 11,769,300	\$ 9,275,000 1,826,000 11,101,000					
Expenses										
Operation and Maintenance Depreciation Total Expenses	6,781,629 3,248,192 10,029,821	6,807,640 2,928,395 9,736,035	7,152,346 3,395,000 10,547,346	7,551,326 2,975,000 10,526,326	6,901,300 3,200,000 10,101,300					
Operating Income (Loss)	1,133,556	1,858,648	679,954	1,242,974	999,700					
Non-Operating Revenues (Expenses)										
Interest Income Interest Expense Gain/Loss on Asset Disposal Amortization of Premium on Debt Issue Total Non-Operating	200,727 (549,687) (31,185) <u>19,438</u> (360,707)	157,142 (541,150) (57,030) 18,773 (422,265)	370,000 (554,013) - - - - - - - - - - - - - - - - - - -	325,000 (554,013) - - - - - - - - - - - - - - - - - - -	260,000 (522,325) 					
Net Income Before Contributions and Transfers	772,849	1,436,383	513,994	1,032,014	754,631					
Contributions and Transfers In (Out)										
Capital Contributions Trans Out - Capital Projects	608,884	292,031 (70,850)	-	- -	156,550 -					
Trans Out - Stormwater Trans Out - General Fund	(500,000) (117,450)	(117,450)	(117,450)	- (117,450)	(117,450)					
Change in Net Assets	764,283	1,540,114	396,544	914,564	793,731					
Net Assets - Beginning	93,634,716	* 94,398,999	95,939,113	95,939,113	96,853,677					
Net Assets - Ending	\$ 94,398,999	\$ 95,939,113	\$ 96,335,657	\$ 96,853,677	\$ 97,647,408					
* as restated SCHEDULE OF CASH FLOWS										

SCHEDULE OF CASH FLOWS

Working Cash - Beginning of Year + Change in Net Assets + Depreciation	14,478,674 914,564 2,975,000	9,527,186 793,731 3,200,000
+ Long Term Debt		· ·
- Contributed Capital - Fixed Assets	- (8,141,052)	(156,550) (5,599,801)
- Principal Repayment	(860,000)	(890,000)
+ Fixed Assets funded by DNR Replacement Fund	160,000	-
Working Cash - End of Year	\$ 9,527,186	\$ 6,874,566

RESERVE REQUIREMENTS

Prior Year Audited Expenditures - Depreciation + Transfer to General Fund	\$ 9,736,035 (2,928,395) 117,450	Fixed Asset Balance 12/31/16 10% Requirement	\$ 20,176,705 \$ 2,017,671
Net Prior Year Cash Expenditures	\$ 6,925,090	DNR Fund Balance 12/31/16	\$ 3,592,322
25 % Working Capital Reserve Requirement	\$ 1,731,273	DNR Funded CIP projects DNR Fund Balance 12/31/17	(160,000) \$ 3,432,322

Working Capital

DNR Fund

CITY OF APPLETON 2018 BUDGET WASTEWATER UTILITY CALCULATION OF RATE INCREASE DOCUMENTATION

Revenues	2017 Budget			2019 Projected	2020 Projected	2021 Projected	2022 Projected
Charges for Services Miscellaneous Total Revenues	\$ 9,658,000 1,569,300 11,227,300	\$ 9,500,000 2,269,300 11,769,300	\$ 9,275,000 1,826,000 11,101,000	\$ 9,298,188 1,828,283 11,126,470	\$ 10,413,970 1,830,568 12,244,538	\$ 10,440,005 1,832,856 12,272,861	\$ 10,466,105 1,835,147 12,301,252
Expenses							
Operating Expenses Depreciation Total Expenses	7,152,346 3,395,000 10,547,346	7,551,326 2,975,000 10,526,326	6,901,300 3,200,000 10,101,300	7,108,339 3,375,000 10,483,339	7,321,589 3,625,000 10,946,589	7,541,237 3,760,000 11,301,237	7,767,474 3,895,000 11,662,474
Operating Income	679,954	1,242,974	999,700	643,131	1,297,949	971,624	638,778
Non-Operating Revenues (Expenses)							
Interest Income Interest Expense Premium on Debt Issue Debt Issue Costs Total Non-Operating	370,000 (554,013) 18,053 	325,000 (554,013) 18,053 - (210,960)	260,000 (522,325) 17,256 	250,000 (573,869) 16,399 (100,000) (407,470)	225,000 (856,277) 15,431 (85,000) (700,846)	200,000 (1,043,602) 14,321 (75,000) (904,281)	150,000 (1,114,604) 13,124 - (951,479)
Net Income Before Transfers	- 513,994	۔ 1,032,014	- 754,631	- 235,661	- 597,102	67,343	(312,701)
Contributions and Transfers In (Out)							
Capital Contributions	-	-	156,550	-	-	-	-
Trans Out - Internal Service General Fund	- (117,450)	- (117,450)	- (117,450)	- (117,450)	- (117,450)	- (117,450)	- (117,450)
Change in Net Assets	396,544	914,564	793,731	118,211	479,652	(50,107)	(430,151)
Total Net Assets - Beginning	95,939,113	- 95,939,113	96,853,677	97,647,408	97,765,619	98,245,271	98,195,164
Total Net Assets - Ending	\$96,335,657	\$96,853,677	\$97,647,408	\$ 97,765,619	\$ 98,245,271	\$ 98,195,164	\$ 97,765,013

SCHEDULE OF CASH FLOWS

Cash - Beginning of the Year	14,478,674	9,527,186	6,874,566	6,004,612	6,456,889	6,908,169
+ Change in Net Assets	914,564	793,731	118,211	479,652	(50,107)	(430,151)
+ Depreciation	2,975,000	3,200,000	3,375,000	3,625,000	3,760,000	3,895,000
+ Long Term Debt	-	-	8,500,000	6,400,000	4,500,000	-
- Contributed Capital	-	(156,550)	-	-	-	-
- Fixed Assets	(8,141,052)	(5,599,801)	(11,943,165)	(9,097,375)	(6,433,613)	(3,220,341)
- Principal Repayment	(860,000)	(890,000)	(920,000)	(955,000)	(1,325,000)	(1,615,000)
+ Fixed Assets funded by DNR Rplcmnt Fund	160,000					
Working Cash - End of Year	\$ 9,527,186	\$ 6,874,566	\$ 6,004,612	\$ 6,456,889	\$ 6,908,169	\$ 5,537,677
25% Working Capital Reserve (prior year's audite	ed expenses)	2,055,697	1,885,269	1,949,915	2,073,829	2,175,572
Coverage Ratio	3.15	3.20	2.72	2.74	2.01	1.79

ASSUMPTIONS:

Borrow 70% of capital expenditures as detailed in plan starting in 2019.

Interest rate at 4%; twenty year term for borrowings starting in 2019

Projected rate increase 1/4% for additional customer base each year.

Operating expenses to increase 3.0% per year after 2018 Maintain a level of 25% working capital reserve and 1.20 coverage ratio as required by bond covenants

RESULTS:

Rates and borrowing needs should be monitored on an annual basis for adjustment based on actual results or changes in circumstances. A 10% rate increase is projected for 1/1/2020 to provide cash flow needed and to cover operating expense and to meet the debt coverage ratio. The current rates were effective 7/1/2011.

CITY OF APPLETON 2018 BUDGET WASTEWATER UTILITY LONG TERM DEBT - REVENUE BONDS

	20 Revenu	06 e Bon	ds	20 Revenu	07 e Bor	ds)08 ng Bonds	
	Principal		Interest	 Principal	Interest		Principal		0	Interest
2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029	\$ 175,000 175,000 185,000 200,000 215,000 225,000 235,000 245,000	\$	84,575 76,700 68,525 59,250 49,333 38,833 27,750 16,167 4,083	115,000 120,000 125,000 135,000 140,000 145,000 155,000 160,000 170,000 180,000	\$	67,427 62,250 56,333 49,750 42,833 35,667 28,083 20,167 11,833 3,000	\$	200,000 215,000 220,000 230,000 240,000 255,000 265,000 275,000 290,000 305,000 315,000	\$	118,919 110,519 101,786 92,336 81,638 70,013 57,845 45,213 32,250 18,750 4,725
2030	-		-	-		-		-		-
2031	 -		-	 -		-		-		-
	\$ 1,850,000	\$	425,216	\$ 1,445,000	\$	377,343	\$	2,810,000	\$	733,994

	2010 Revenue Bonds				2011 Revenue Bonds			
		Principal		Interest	 Principal		Interest	
2018 2019 2020 2021 2023 2024 2025 2026 2027 2028 2029 2030	\$	235,000 245,000 260,000 270,000 280,000 300,000 315,000 325,000 340,000 355,000 370,000	\$	$\begin{array}{c} 137,854\\ 130,800\\ 123,350\\ 114,783\\ 105,450\\ 95,300\\ 84,067\\ 72,200\\ 59,800\\ 46,933\\ 33,533\\ 19,533\\ 4,933\\ \end{array}$	\$ $\begin{array}{c} 165,000\\ 165,000\\ 175,000\\ 190,000\\ 190,000\\ 195,000\\ 205,000\\ 210,000\\ 220,000\\ 230,000\\ 240,000\\ 250,000\\ 260,000\\ 260,000\\ \end{array}$	\$	113,550 108,600 102,283 95,150 87,683 79,950 71,883 63,550 54,883 45,817 36,350 26,483 16,217	
2031				-	 300,000		4,250	
	\$	3,835,000	\$	1,028,536	\$ 2,985,000	\$	906,649	

	TOTAL									
	Principal		Interest		Total					
2018	890,000	\$	522,325	\$	1,412,325					
2019	920,000		488,869		1,408,869					
2020	955,000		452,277		1,407,277					
2021	1,000,000		411,269		1,411,269					
2022	1,040,000		366,937		1,406,937					
2023	1,090,000		319,763		1,409,763					
2024	1,140,000		269,628		1,409,628					
2025	1,180,000		217,297		1,397,297					
2026	1,240,000		162,849		1,402,849					
2027	1,040,000		114,500		1,154,500					
2028	895,000		74,608		969,608					
2029	605,000		46,016		651,016					
2030	630,000		21,150		651,150					
2031	300,000		4,250		304,250					
	·									
	\$ 12,925,000	\$	3,471,738	\$	16,396,738					

Note: Schedule is based on accrual method of accounting. Revenue bonds will not be issued in 2018.