



City of Appleton

100 North Appleton Street
Appleton, WI 54911-4799
www.appleton.org

Meeting Agenda - Final Utilities Committee

Tuesday, October 24, 2017

5:00 PM

Council Chambers, 6th Floor

1. Call meeting to order

2. Roll call of membership

3. Approval of minutes from previous meeting

[17-1622](#) Approval of the October 10, 2017 Utilities Committee Meeting minutes.

Attachments: [October 10, 2017 Utilities Committee Meeting Minutes.pdf](#)

4. **Public Hearings/Apearances**

5. **Action Items**

[17-1625](#) Award contract to Patrick Engineering for design and engineering services for the Wastewater Plant Electrical Distribution Feasibility Study and Master Plan project for a contract of \$114,540.

Attachments: [2017 Wastewater Electrical Distribution Phase one design.pdf](#)

6. **Information Items**

[17-1628](#) Discussion of 2018 Executive Budget.

Attachments: [2018 Water.pdf](#)
[2018 Wastewater.pdf](#)
[2018 Stormwater Utility from DPW.pdf](#)

17-1632

Monthly Reports for July, August, September 2017

- Wastewater Treatment Plant Synopsis and Receiving Station Revenue Report
- Water Treatment Facility Synopsis
- Water Distribution and Meter Team Monthly Report - September

Attachments: [2017 AWTP Q3 Synopsis.pdf](#)

[2017 AWTF Q3 Synopsis.pdf](#)

[Water Meter Team Reports September.pdf](#)

7. Adjournment

Notice is hereby given that a quorum of the Common Council may be present during this meeting, although no Council action will be taken.

Reasonable Accommodations for Persons with Disabilities will be made upon Request and if Feasible.

For questions on the agenda, contact Chris Shaw at 920-832-5945 or Paula Vandehey at 920-832-6474.



City of Appleton

100 North Appleton Street
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Meeting Minutes Utilities Committee

Tuesday, October 10, 2017

5:00 PM

Council Chambers, 6th Floor

1. Call meeting to order

Chairperson Dannecker called the Utilities Committee Meeting to order at 5 p.m.

2. Roll call of membership

Present: 4 - Dannecker, Meltzer, Reed and Dvorachek

Excused: 1 - Baranowski

3. Approval of minutes from previous meeting

[17-1458](#)

Approval of the September 12, 2017 Utilities Committee Meeting minutes.

Attachments: [September 12, 2017 Utilities Committee Meeting Minutes.pdf](#)

**Dvorachek moved, seconded by Reed, that the Minutes be approved. Roll Call.
Motion carried by the following vote:**

Aye: 4 - Dannecker, Meltzer, Reed and Dvorachek

Excused: 1 - Baranowski

4. Public Hearings/Appearances

5. Action Items

[17-1510](#)

Award Unit N-17 CIPP Liner, Spot Repairs, Protruding Tap & Mineral Deposit Removal to Great Lakes TV & Seal, Inc in an amount not to exceed \$171,000.

Attachments: [N-17 attachment.pdf](#)

Meltzer moved, seconded by Dvorachek, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:

Aye: 4 - Dannecker, Meltzer, Reed and Dvorachek

Excused: 1 - Baranowski

6. Information Items

[17-1516](#)

2017 AWWTP Improvements Project Engineering Services Amendment #1 reducing Donohue total contract amount by \$25,945; Sole Source Hydraulic Analysis Contract to Donohue in the amount of \$11,980.

Attachments: [AWWTP Improvements Project Donohue Contract Amendment#1 UC Memo.pdf](#)

This item was presented.

[17-1513](#)

Authorization request to sell Water Plant membrane cartridges and decommissioned ultrafiltration equipment through a consignment agreement(s). This item will be an action item at the Finance Committee meeting.

Attachments: [Membrane Consignment Request.pdf](#)

This item was presented.

[17-1512](#)

Discussion of 2018 Executive Budget.

Attachments: [2018 Water.pdf](#)
[2018 Wastewater.pdf](#)
[2018 Stormwater Utility from DPW.pdf](#)

This item was presented.

[17-1515](#)

Appleton Water Plant Operations Supervisor Joe Myers - Recipient of the 2017 AWWA Meritorious Service Award.

This item was presented.

[17-1517](#)

Monthly Reports for August
- Water Distribution and Meter Team Monthly Report

Attachments: [Meter Team Reports August.pdf](#)

This item was presented.

7. Adjournment

Dvorachek moved, seconded by Meltzer, that the Utilities Committee Meeting be adjourned. Roll Call. Motion carried by the following vote:

Aye: 4 - Dannecker, Meltzer, Reed and Dvorachek

Excused: 1 - Baranowski



"...meeting community needs...enhancing quality of life."

**PARKS, RECREATION & FACILITIES
MANAGEMENT**

Dean R. Gazza, Director

1819 East Witzke Boulevard
Appleton, Wisconsin 54911-8401
(920) 832-5572 FAX (920) 993-3103
Email - dean.gazza@appleton.org

TO: Utilities Committee

FROM: Dean R. Gazza, Director of Parks, Recreation and Facilities Management

DATE: 10/24/2017

RE: Action Item: Award contract to Patrick Engineering for design and engineering services for the Wastewater Plant Electrical Distribution Feasibility Study and Master Plan project for a contract of \$114,540.

The 2017 Capital Improvement budget allocated monies to perform engineering services for the Wastewater Plant Electrical Distribution Phase I Engineering. This will be the first construction phase of a multi-phase project to upgrade the aging electrical distribution equipment. Most of the equipment is over 40 years old and is at the end of its estimated and useful life.

Two firms responded to Request for Proposals. They were evaluated for relevant experience, project success, project team members, project understanding, project schedule, and cost. It was important that the firms clearly demonstrated experience in electrical distribution design and planning along with experience in working on municipal wastewater treatment facilities. The project team for evaluating the firms consisted of: the Facilities Project Manager, Facilities Manager, Facilities Lead Electrician, Parks Recreation and Facilities Management Director, and the Utilities Director.

Patrick Engineering	\$114,540
Donahue and Associates	\$159,140

After careful review our team recommends awarding a contract to Patrick Engineering for \$114,540. The project team unanimously chose Patrick Engineering based upon experience, cost, and their proposal. We believe that our choice of Patrick Engineering will ensure that the investment is fully maximized.

Please feel free to contact me at 832-5572 with any questions, or by email at dean.gazza@appleton.org.

CITY OF APPLETON 2018 BUDGET

WATER 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

CITY OF APPLETON 2018 BUDGET WATER UTILITY

MISSION STATEMENT

The City of Appleton water treatment and distribution systems provide the community with consistently safe and high quality water utilizing the full potential of our highly motivated, technically skilled staff. It is our goal to achieve these objectives in a manner that demonstrates integrity, responsibility and economically sound practices.

DISCUSSION OF SIGNIFICANT 2017 EVENTS

WATER TREATMENT

Membrane Treatment Operation - The Koch Membrane System (KMS) was not operated during 2017. Regulatory approval to transition away from ultrafiltration and to the new ultraviolet light was finalized in June 2017. Water quality goals were met with increased performance for virus destruction and parasite deactivation.

Ultraviolet Light Process - The ultraviolet light process has performed well under the first year of operation. Plant operating costs have continued to decline for electrical, chemical and manpower as plant operations are becoming refined. The UV process equipment continues to be under warranty until 2020 and 2025.

1 Million Gallon Glendale Tower - The Glendale Water Tower was completed in July of 2017. The Glendale Tower replaces the 0.5 million gallon Oneida Street Tower which was taken out of service and decommissioned. The Glendale tower meets the hydraulic needs of the City's main pressure zone. The new tower remains in the warranty phase until September 2021.

Matthias Water Tower - The Matthias tower valve vault underwent a maintenance project to mitigate pipe and equipment corrosion and increase personnel safety issues with confined space entry.

Tank Maintenance - #3 and #4 Softener tanks were taken out of service to complete rehabilitation and coatings work. The softeners were media blasted and painted to prevent further corrosion.

Plant Process Control - The recently repurposed filters were optimized by water plant staff. Filter performance was improved by adjusting hydraulic loading rates, runtimes, and the backwash air and scour rates. Turbidity removals were increased by applying Aluminum Chlorohydrate (ACH).

WATER DISTRIBUTION

Celebrated National Public Works Week with a department-wide breakfast for Public Works employees

Completed the Sensus/ I-perl water meter radio read system installation

Continued to sell our used water meters and other components to a local scrap company

WATER ADMINISTRATION

Reviewed rate requirements. The utility had a 6.33% rate of return for 2016. The utility is currently authorized a rate of return of 7%. A rate increase is not planned for 2018 as debt coverage ratio and cash coverage have been maintained with current rates.

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

MAJOR 2018 OBJECTIVES

The Departments of Public Works and Utilities will work together to provide effective and efficient operation of the Water Utility in order to:

Provide water that meets all State and federal water quality standards and regulations; continue to meet WDNR requirements for annual inspections and make any requested corrections.

The water plant Supervisory Control and Data Acquisition (SCADA) system will be further upgraded for operator interfacing with the new regulatory reporting software. The system's uninterruptable power source (UPS) will also be replaced. Other SCADA improvements include replacement of field instruments.

The Glendale Water Tower construction project will be finalized by an inspection of the coatings system prior to the warranty end date.

The water distribution system will continue to be refined and balanced for pressure and flow throughout the main, medium, and high pressure zones.

The Raw Water Lake Station Project will make necessary upgrades and meet redundancy objectives for the raw water pipe that pumps water from the lake to the water plant. The existing pipe is 60 years old and will need to either be replaced or become the redundant back up to a new pipe. Other project components include a new lake intake to deter frazil ice formation and screening equipment at the shore well.

Chemical delivery systems will be repaired or replaced depending on current state of conditions. Systems for 2018 include: carbon dioxide, polyphosphate, and aluminum chlorohydrate.

Respond promptly to main breaks to minimize water loss, property damage, and disruption of service to our customers using criteria established for emergency vs. non-emergency repairs.

Continue reviewing the lead service replacement program to reduce service replacement costs to allow for an aggressive lead service replacement schedule.

Incorporate recommendations from the water distribution study into appropriate operating and capital budget requests.

Implement customer portal for new Sensus meters to allow water utility customers to monitor their own water use.

Pursue providing leak detection surveys on properties believed to have galvanized services on private property.

Install new bulk water dispensing system for better customer service.

Continue to monitor rate requirements. The last water rate increase of 10% was implemented on December 31, 2010. The utility continues to meet debt coverage ratios and cash coverage and continues to earn rate of return as approved by the Wisconsin Public Service Commission. These indicators will be reviewed upon the completion of the 2017 audit, to further determine when the next rate increase application will be filed with the Public Service Commission.

DEPARTMENT BUDGET SUMMARY							
Programs		Actual		Budget		% Change *	
Unit	Title	2015	2016	Adopted 2017	Amended 2017	2018	
Program Revenues		\$ 21,589,934	\$ 22,033,410	\$ 22,448,046	\$ 22,448,046	22,411,582	-0.16%
Program Expenses							
5310	Administration	9,827,995	10,299,411	10,059,479	10,059,479	9,953,169	-1.06%
5321	Treatment Admin	322,318	373,221	395,175	397,556	396,282	0.28%
5323	Treatment Operations	5,593,016	5,747,083	6,627,292	6,647,577	5,718,576	-13.71%
5351	Distribution Admin	505,775	515,492	501,120	502,772	610,310	21.79%
5352	Meter Operations	110,398	94,203	150,159	151,124	261,766	74.33%
5353	Distribution Operations	1,051,289	1,053,581	1,349,769	1,376,633	1,479,198	9.59%
5325	Treatment Capital	65,177	45,122	1,091,000	1,301,366	700,000	-35.84%
5370	Distribution Capital	78,708	42,704	4,342,347	5,258,528	3,503,847	-19.31%
TOTAL		\$ 17,554,676	\$ 18,170,817	\$ 24,516,341	\$ 25,695,035	22,623,148	-7.72%
Expenses Comprised Of:							
Personnel		2,430,428	2,776,825	3,295,465	3,306,512	3,160,978	-4.08%
Administrative Expense		9,562,659	9,893,624	9,764,690	9,764,690	9,649,677	-1.18%
Supplies & Materials		1,834,370	1,648,939	1,864,707	1,872,707	1,823,025	-2.24%
Purchased Services		698,362	421,572	1,950,325	2,185,588	1,068,365	-45.22%
Utilities		2,708,737	2,695,356	3,042,789	3,042,789	2,825,846	-7.13%
Repair & Maintenance		681,363	944,353	701,211	701,211	816,157	16.39%
Capital Expenditures		(361,243)	(209,852)	3,897,154	4,821,538	3,279,100	-15.86%
Full Time Equivalent Staff:							
Personnel allocated to programs		37.73	38.24	38.28	38.28	36.84	

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Finance Administration

Business Unit 5310

PROGRAM MISSION

For the benefit of Appleton water consumers, customer billing and financial systems will be maintained in a manner consistent with Wisconsin Public Service Commission (PSC) regulations and generally accepted accounting principles.

PROGRAM NARRATIVE

Link to City Goals:

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

Objectives:

To account for water revenues from various sources, and administrative overhead costs such as interest, depreciation, insurance and other miscellaneous expenses.

Maintain customer records and accounting information in compliance with PSC regulations and generally accepted accounting principles.

Develop the full potential of all employees through seminars, training programs, and continuing education

Major changes in Revenue, Expenditures or Programs:

The capital contributions revenue represents funding provided from TIF#11 for water infrastructure up-grades.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Timely and accurate posting of overhead expenses					
% of months posted within 10 days of end of month	50%	75%	92%	83%	83%
Strategic Outcomes					
Maintain compliance with GAAP & PSC					
# of audit compliance issues not raised by staff	0	0	0	0	0
Water rate changes					
% per year	0%	0%	0%	0%	0%
Work Process Outputs					
# of bills processed	113,384	113,992	114,500	114,500	115,000
PSC Annual Report filed	On time	On time	On time	On time	On time

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Finance Administration

Business Unit 5310

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 2017	2018
Revenues					
4411 Sundry Permits	\$ 315	\$ 210	\$ 500	\$ 500	200
4710 Interest on Investments	156,367	132,716	300,000	300,000	250,000
4730 Interest - Deferred Special	447	-	-	-	-
4820 Unmetered Water Sales	25,618	21,796	25,000	25,000	22,000
4821 Water Service - Residential	8,455,250	8,414,600	8,425,000	8,425,000	8,375,000
4822 Water Service - Commercial	2,246,591	2,316,117	2,235,000	2,235,000	2,285,000
4823 Water Service - Industrial	1,299,162	1,243,460	1,300,000	1,300,000	1,250,000
4824 Water Service - Municipal	411,105	376,420	380,000	380,000	370,000
4825 Private Fire Protection	252,677	259,398	255,000	255,000	265,000
4826 Public Fire Protection	1,767,617	1,784,428	1,773,000	1,773,000	1,792,000
4827 Fire Protection Wholesale	197,652	198,187	196,500	196,500	196,500
4828 Water Service - Multi-family	644,756	666,485	650,000	650,000	700,000
4829 Sales for Resale	5,169,787	5,337,036	5,250,000	5,250,000	5,250,000
5005 Sale of City Prop - Tax	26,311	19,348	15,000	15,000	-
5006 Gain (Loss) on Asset Disposal	(327,585)	-	-	-	-
5016 Lease Revenue	258,722	266,115	260,000	260,000	280,000
5021 Capital Contributions	502,381	355,807	702,450	702,450	312,750
5030 Damage to City Property	3,304	11,056	3,500	3,500	4,000
5035 Other Reimbursements	1,995	9,098	-	-	2,500
5070 WTR Other Sales Flushing	10,124	9,349	8,000	8,000	10,000
5071 Customer Penalty	84,210	85,737	87,000	87,000	86,000
5072 WTR Misc Revenue (turn-on)	4,265	4,475	4,500	4,500	3,000
5073 Other WTR Rev-Sewer Billing	134,973	179,968	210,000	210,000	222,000
5077 Income from Admin Fee	4,970	7,753	5,000	5,000	5,000
5079 Private Hydrant Testing	13,936	13,765	14,500	14,500	14,500
5083 Emergency Water Turn Off	509	643	-	-	-
5086 Premium on Debt Issuance	244,475	319,443	348,096	348,096	716,132
Total Revenue	<u>\$ 21,589,934</u>	<u>\$ 22,033,410</u>	<u>\$ 22,448,046</u>	<u>\$ 22,448,046</u>	<u>22,411,582</u>
Expenses					
6101 Regular Salary	\$ 107,900	\$ 109,578	\$ 114,448	\$ 114,448	118,080
6105 Overtime	318	298	-	-	-
6150 Fringes	26,747	170,526	43,417	43,417	49,527
6304 Postage\Freight	20,566	18,249	22,000	22,000	24,000
6320 Printing and Reproduction	3,003	2,392	3,300	3,300	3,300
6401 Accounting/Audit	11,317	11,140	12,020	12,020	9,360
6402 Legal Fees	17,896	22,467	22,000	22,000	23,000
6403 Bank Services	21,879	22,034	23,000	23,000	23,000
6413 Utilities	95,554	97,862	108,000	108,000	108,000
6429 Interfund Allocations	-	(480)	-	-	-
6501 Insurance - Property	109,172	111,462	132,450	132,450	127,710
6601 Depreciation Expense	4,353,070	4,517,926	5,065,000	5,065,000	5,065,000
6623 Uncollectible Accounts	6,752	3,935	8,000	8,000	8,000
6721 Bond Interest Payments	2,708,421	2,861,629	2,165,315	2,165,315	2,021,665
6730 Debt Issuance Cost	296,109	286,749	85,000	85,000	85,000
6751 Gain/Loss on refund Amort.	145,615	209,558	229,729	229,729	273,727
7911 Trans Out - Gen Fund	1,894,688	1,854,086	2,025,800	2,025,800	2,013,800
7914 Trans Out - Capital Projects	8,988	-	-	-	-
Total Expense	<u>\$ 9,827,995</u>	<u>\$ 10,299,411</u>	<u>\$ 10,059,479</u>	<u>\$ 10,059,479</u>	<u>9,953,169</u>

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

<u>Printing\Freight</u>		<u>Trans Out-Gen Fund</u>	
City Service Invoice postage	\$ 22,500	Payment in lieu of tax	\$ 2,000,000
City Service Invoice folding/inserting	1,500	Administration fee	13,800
	<u>\$ 24,000</u>		<u>\$ 2,013,800</u>
 <u>Legal Fees</u>			
PSC Assessment	\$ 23,000		
	<u>\$ 23,000</u>		

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Treatment Administration

Business Unit 5321

PROGRAM MISSION

For the benefit of the Water Filtration Operations Staff, Water Utility managers will provide administrative support and mentoring to employees so that all aspects of water treatment will meet State and federal compliance.

PROGRAM NARRATIVE

Link to City Goals:

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

Objectives:

Maintain records necessary for compliance with State and federal organizations

Maintain maintenance records for equipment, procurement of chemicals, training and safety schedules, operating expenses and project status

Maintain financial records as they apply to the treatment plant

Major changes in Revenue, Expenditures or Programs:

Training\Conferences expense include fees to send up to two employees to Surface Water Chemistry training.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Safe work environment					
# of workers comp claims/year	0	0	0	0	0
# of first aid entries per year	4	0	0	2	0
Strategic Outcomes					
Effective use of budgeted funds					
% of operational budget obligated	85%	85%	100%	97%	100%
Trained Staff					
% of staff adequately trained	98%	100%	100%	100%	100%
Average # of hours training per employee	30	10	60	10	25
Work Process Outputs					
Government reports prepared					
# and names of regular reports					
CCR Report	1	1	1	1	1
DNR Reports	12	12	12	12	12
SARA* Report	1	2	2	2	2

*Superfund Amendments and Reauthorization Act

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Treatment Administration

Business Unit 5321

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 2017	2018
Expenses					
6101 Regular Salary	\$ 218,105	\$ 253,301	\$ 264,105	\$ 266,178	260,456
6104 Call Time	13	14			
6105 Overtime	105	329	2,327	2,327	2,362
6108 Part-Time	5,868	1,696	1,877	1,877	2,798
6150 Fringes	62,494	75,610	77,652	77,960	78,409
6201 Training\Conferences	716	4,459	11,000	11,000	11,000
6301 Office Supplies	2,116	1,104	2,500	2,500	2,500
6303 Memberships & Licenses	7,661	7,841	7,850	7,850	8,000
6304 Postage/Freight	1,138	1,583	1,000	1,000	1,200
6305 Awards & Recognition	47	181	210	210	210
6307 Food & Provisions	436	316	280	280	280
6320 Printing & Reproduction	9,595	11,319	10,852	10,852	10,600
6321 Clothing	178	27	-	-	-
6327 Miscellaneous Equipment	-	696	-	-	200
6404 Consulting Services	1,325	-	-	-	-
6408 Contractor Fees	2,671	2,492	3,000	3,000	3,000
6411 Temporary Help	276	-	-	-	-
6412 Advertising	-	-	1,500	1,500	1,000
6413 Utilities	8,759	11,475	10,140	10,140	12,550
6425 CEA Equip. Rental	815	778	882	882	1,717
Total Expense	\$ 322,318	\$ 373,221	\$ 395,175	\$ 397,556	396,282

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

None

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Treatment Operations

Business Unit 5323

PROGRAM MISSION

For the benefit of Appleton water consumers, we will provide potable water so that customers are furnished an adequate volume of the safest, highest quality water available.

PROGRAM NARRATIVE

Link to City Goals:

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

Objectives:

Comply with all State and federal standards

Supply the public with safe, high quality water in sufficient quantities to support the needs of our customers

Major changes in Revenue, Expenditures or Programs:

The salary budget reflects the reduction of .3 FTE of the allocation of a shared Electrician and Maintenance Specialist with the Wastewater Utility; current maintenance needs have been reduced at the Water Treatment Facility and needs at the Wastewater Treatment Plant have increased due to aging equipment and additional lift stations coming on-line. The overtime budget has been reduced as additional time is no longer needed to maintain the membrane system.

Lab Supplies expense reflects the moving of the expense paid to outside laboratories to the Lab Fees account and maintenance of lab equipment to Contractor Fees.

Building repair and maintenance expense reflects the cost of expansion joint repair.

Contractor Fees are reduced as there are no significant maintenance or equipment upgrade projects planned for the water towers or at the treatment facility; 2017 expense was for painting the north reservoir.

The Materials expense account has been merged into the Equipment Parts expense starting in 2018.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Adequate supply of safe drinking water					
% of water sampling tests in compliance per year	100%	100%	100%	100%	100%
Adequate water pressure					
% of tests having adequate pressure	100%	100%	100%	100%	100%
# of sprinkling bans per year	0	0	0	0	0
# of gallons pumped per year	3,257 MG	3,275 MG	3,200 MG	3,200 MG	3,200 MG
Work Process Outputs					
Efficient Plant Operation					
# of work days lost due to injuries	0	0	0	0	0
# of reservoirs maintaining pressure per year	6	6	7	6	7
# of membrane repairs	19,522	12,855	2,000	2,000	0
Water towers					
# inspected / painted per year	2 / 0	1 / 1	1 / 1	1 / 1	1 / 0

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Treatment Operations

Business Unit 5323

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 2017	2018
Expenses					
6101 Regular Salary	\$ 600,805	\$ 636,604	\$ 668,826	\$ 672,470	659,675
6104 Call Time	1,373	559	2,832	2,832	2,859
6105 Overtime	98,647	91,864	97,595	97,595	85,414
6108 Part-Time	10,116	7,289	-	-	-
6150 Fringes	223,885	248,066	262,587	263,128	266,732
6306 Building Maint./Janitorial	1,833	1,967	2,300	2,300	2,100
6309 Shop Supplies & Tools	9,428	9,820	11,000	11,000	11,500
6310 Chemicals	1,334,340	1,322,812	1,400,000	1,400,000	1,369,000
6316 Miscellaneous Supplies	292	360	-	-	-
6318 Materials	113,577	11,977	42,000	42,000	-
6321 Clothing	2,411	2,181	2,500	2,500	2,500
6322 Gas Purchases	4,607	12,367	5,000	5,000	10,000
6323 Safety Supplies	17,284	1,865	6,200	6,200	6,200
6324 Medical/Lab Supplies	65,681	62,849	73,950	73,950	38,850
6326 Equipment Parts	-	828	-	-	42,000
6327 Miscellaneous Equipment	30,761	18,340	48,500	56,500	46,500
6404 Consulting Services	7,300	32,366	25,500	33,600	10,000
6407 Collection Services	1,506	1,933	2,550	2,550	2,850
6408 Contractor Fees	130,632	94,829	780,500	780,500	46,990
6413 Utilities	2,547,868	2,530,531	2,864,454	2,864,454	2,646,025
6416 Building Repairs & Maint	154,198	412,349	-	-	70,000
6418 Equip Repairs & Maint	65,918	38,114	30,000	30,000	55,000
6420 Facilities Charges	217,164	243,857	250,217	250,217	268,413
6424 Software Support	1,810	11,015	12,000	12,000	12,900
6425 CEA Equip. Rental	14,059	13,152	13,976	13,976	15,273
6432 Lab Fees	-	16,849	-	-	20,300
6440 Snow Removal Services	242	5,520	5,000	5,000	5,000
6454 Grounds Repair & Maint	5,479	6,286	5,500	5,500	7,500
6599 Other Contracts/Obligations	14,848	12,309	14,305	14,305	14,995
6899 Other Capital Outlay	(83,048)	(101,775)	-	-	-
Total Expense	\$ 5,593,016	\$ 5,747,083	\$ 6,627,292	\$ 6,647,577	5,718,576

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

<u>Chemicals</u>		<u>Miscellaneous Equipment</u>	
Ammonia	\$ 35,000	2-channel auto-titrator	\$ 9,500
Carbon dioxide	65,000	LED turbidimeter	3,000
Caustic soda	1,000	Chlorine analyzers	8,000
Chlorine	80,000	DR 6000 spectrophotometer	10,000
Ferric sulfate	140,000	SCADA equipment	16,000
Fluoride	20,000		<u>\$ 46,500</u>
Lime	475,000		
Poly phosphate	60,000	<u>Contractor Fees</u>	
Permanganate	360,000	Lab equipment maintenance	\$ 2,700
Powder carbon	60,000	Annual safety inspections	4,190
Softener Polymer	35,000	MCC softener maintenance	20,000
ACH	30,000	Mag meter validation testing	1,500
Softener Salt	2,000	Intake inspection	6,000
Other chemicals	5,000	Tower cleaning & inspection	9,000
Acids	1,000	Tower cathodic protection	3,600
	<u>\$ 1,369,000</u>		<u>\$ 46,990</u>
<u>Equipment Parts</u>		<u>Medical/Lab Supplies</u>	
Valves & actuators	\$ 5,000	Lab supplies	\$ 20,000
Piping, hoses & tubing	2,500	Nitrogen	1,850
Filters & lubricants	2,500	Bac T testing supplies	13,000
UV light replacements	32,000	Media & filters	4,000
	<u>\$ 42,000</u>		<u>\$ 38,850</u>
<u>Lab Fees</u>		<u>Equipment Repair & Maintenance</u>	
DBPR-2 testing	\$ 4,480	Pumps & motor repairs	\$ 30,000
Water quality parameters	1,600	Dehumidifier maintenance	25,000
Synthetic organic compound testing	2,250		<u>\$ 55,000</u>
UCMR-4 testing	10,000	<u>Building Repair & Maintenance</u>	
Other required testing	1,970	Expansion joint repair	\$ 70,000
	<u>\$ 20,300</u>		<u>\$ 70,000</u>

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Treatment Capital Improvements

Business Unit 5325

PROGRAM MISSION

For the benefit of Appleton water consumers, we will provide necessary improvements to all Water Filtration facilities, structures, and equipment so that high quality water is produced to meet current and future needs in a cost-effective manner.

PROGRAM NARRATIVE

Link to City Goals:

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

Objectives:

Ensure the integrity of Appleton water for all customers

The following are 2018 CIPs:

	<u>2018 Budget</u>	<u>Page</u>
Computer Control Uninterruptable Power Supply System	75,000	Projects, Pg. 640
Chemical Storage	500,000	Projects, Pg. 623
Second Raw Water Line	100,000	Projects, Pg. 575
HVAC	25,000	Projects, Pg. 614
	<u>\$ 700,000</u>	

Major changes in Revenue, Expenditures or Programs:

No major changes.

PERFORMANCE INDICATORS

<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
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Note: Since this business unit exists solely to account for capital investments at the Water Treatment Facility, lake station and towers, there are no applicable performance measures.

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Treatment Capital Improvements

Business Unit 5325

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 2017	2018
Expenses					
6101 Regular Salary	\$ (1,829)	\$ -	\$ -	\$ -	-
6105 Overtime	1,829	-	-	-	-
6325 Construction Materials	75	-	-	-	-
6404 Consulting Services	166,322	51,297	130,000	157,163	125,000
6408 Contractor Fees	178,714	49,944	806,000	981,000	500,000
6599 Other Contracts/Obligations	1,395	-	-	-	-
6802 Land Improvements	68,593	-	125,000	125,000	-
6803 Buildings	55,109	125,101	-	-	-
6804 Equipment	1,743,086	1,503,018	30,000	38,203	75,000
6899 Other Capital Outlay	(2,148,117)	(1,684,238)	-	-	-
Total Expense	\$ 65,177	\$ 45,122	\$ 1,091,000	\$ 1,301,366	700,000

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

Consulting Services

Second raw water line
HVAC replacement design

\$ 100,000
25,000
\$ 125,000

Equipment

Computer controlled power
supply

\$ 75,000
\$ 75,000

Contractor Fees

Chemical storage

\$ 500,000
\$ 500,000

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Distribution Administration

Business Unit 5351

PROGRAM MISSION

Provide administrative services to meet the needs of our customers.

PROGRAM NARRATIVE

Link to City Goals:

Implements Key Strategies # 1: "Prompt delivery of excellent services", # 2: "Encourage active community participation and involvement", # 3: "Recognize and grow everyone's talents", # 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:

Maintain accurate records of repair and maintenance to the system and ensure completeness of all information submitted annually to the Public Service Commission
 Continue to enforce the Exception Meter Policy to insure meter accuracy and recover meter costs
 Continue practicing proper safety procedures when changing out old lead services
 Increase inventory turnover ratio by decreasing excessive, obsolete, and rare parts from inventory
 Maintain accurate records of all valves, services, and hydrants to simplify reporting to the Public Service Commission and ensure integrity of our records

Major changes in Revenue, Expenditures or Programs:

The increase in other contracts and obligations is due to an increased use of Digger's Hotline and the increase in the number of street excavation permits with Outagamie County.

We have been using summer seasonal staff to update the water records. In 2018, less staff time will be needed accounting for the decrease in part-time salary dollars as we are becoming more current with our records.

Appointment request letters will be minimal due to anticipated completion of the meter install program.

The number of cross connection inspections has been reduced in 2018 (see below), due to the anticipated completion of the meter install program. The target 2018 reflects expected customer service visits to properties where cross connection inspections will take place.

Consulting expense is for the cost to complete a distribution study. The last study was completed in 2007. Information from this study is used to prioritize new and replacement projects for water towers, transmission lines and distribution lines.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Efficient customer service					
# Cross connection inspections	6,615	8,977	7,000	7,000	1,500
# Appointment request letters sent	11,757	18,367	10,000	10,000	100
Strategic Outcomes					
Consistent & current information					
Policies reviewed/updated	1	0	1	1	1
Turnover ratio of inventory	0.72	0.72	0.80	0.90	0.90
Work Process Outputs					
Reporting & record keeping					
# of reports generated for PSC	1	1	1	1	1

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Distribution Administration

Business Unit 5351

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 2017	2018
Expenses					
6101 Regular Salaries	\$ 237,945	\$ 265,433	\$ 263,902	\$ 265,340	267,253
6104 Call Time	1,067	1,650	1,200	1,200	1,200
6105 Overtime	1,491	916	1,700	1,700	1,500
6108 Part-Time	22	1,562	4,836	4,836	-
6150 Fringes	82,670	125,173	88,805	89,019	92,325
6201 Training\Conferences	2,060	726	3,800	3,800	2,500
6301 Office Supplies	706	869	1,200	1,200	1,000
6303 Memberships & Licenses	345	603	870	870	870
6304 Postage\Freight	253	31	260	260	250
6305 Awards & Recognition	618	611	665	665	665
6306 Building Maint./Janitorial	2,134	2,500	2,361	2,361	2,450
6309 Shop Supplies & Tools	23	48	50	50	50
6318 Materials	70,220	-	20,000	20,000	-
6320 Printing & Reproduction	1,190	1,392	2,500	2,500	2,000
6321 Clothing	906	776	1,600	1,600	1,600
6323 Safety Supplies	815	712	900	900	900
6324 Medical/Lab Supplies	73	96	100	100	100
6327 Miscellaneous Equipment	4,549	5,936	4,280	4,280	4,250
6404 Consulting Services	3,361	-	-	-	125,000
6412 Advertising/Publication	-	-	100	100	-
6413 Utilities	56,230	54,998	59,091	59,091	57,471
6419 Communications Equip Rep.	180	-	-	-	-
6420 Facilities Charges	21,263	21,889	22,310	22,310	22,176
6424 Software Support	2,082	3,426	3,000	3,000	3,340
6425 CEA Equip. Rental	4,433	11,093	5,540	5,540	5,540
6430 Health Services	38	-	50	50	50
6599 Other Contracts/Obligations	11,101	15,052	12,000	12,000	17,820
Total Expense	<u>\$ 505,775</u>	<u>\$ 515,492</u>	<u>\$ 501,120</u>	<u>\$ 502,772</u>	<u>610,310</u>

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

Other Contracts/Obligations

Excavation permits (City)	\$ 6,000
Digger's Hotline fees	7,500
Excavation permits (County)	4,320
	<u>\$ 17,820</u>

Consulting Services

Distribution study	\$ 125,000
	<u>\$ 125,000</u>

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Meter Operations & Maintenance

Business Unit 5352

PROGRAM MISSION

The department reads, maintains and upgrades meters for the benefit of all users of the system.

PROGRAM NARRATIVE

Link to City Goals:

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:

- Inspect exception meters as the new meter system is installed
- Ensure commercial and residential meters are the proper size and type when installing new meters
- Continue to monitor cross connection program to prevent illegal connections into the City water system
- Implement a Customer Portal and educate residents and customers on the use and benefits of the portal

Major changes in Revenue, Expenditures or Programs:

The 2018 budget reflects the transition of wage expense back into customer service modules as the completion of the capital project of implementing the 27,738 new Sensus meters will be completed in 2017.

The software support includes the hosting fee of the data associated with the new meter reading system adjusted for the number of active meters. The larger increase is mainly attributed to the addition of the hosting fees of the new customer service portal which will be implemented in 2018.

With the completion of the new meter installation program, the need once again to purchase meters and related cost moves back to the meter operations and maintenance business unit. This results in an increase in miscellaneous equipment to purchase 150-200 meters annually for new customers.

Increase in shop supplies and tool expense is to add three iPads for monitoring out in the field, a DeWalt air hammer & inverter, along with the additional supplies needed for the meter test bench.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Reliable, accurate water usage					
# of large meters replaced	0	0	0	0	0
# of meters tested	6,981	9,266	7,000	7,000	50
# of defective meters replaced	248	436	50	50	50
# of meters in service	27,618	27,797	27,800	27,800	27,850
Strategic Outcomes					
Implementation of system upgrade					
# of trace batteries replaced	0	0	0	0	0
# of meters replaced	7,090	9,573	7,000	7,000	25
Work Process Outputs					
Service provided					
# of service calls	1,497	1,408	1,500	1,500	1,500
System growth					
# new customer meters installed	120	166	100	100	150

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Meter Operations & Maintenance

Business Unit 5352

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 2017	2018
Expenses					
6102 Labor Pool Allocations	\$ 55,272	\$ 34,612	\$ 64,169	\$ 65,009	\$ 99,124
6104 Call Time	113	119	240	240	150
6105 Overtime	685	1,021	1,150	1,150	1,000
6150 Fringes	23,010	17,913	26,241	26,366	41,022
6304 Postage/Freight	-	-	150	150	100
6306 Building Maint./Janitorial	142	-	150	150	150
6309 Shop Supplies	4,541	6,639	3,550	3,550	5,900
6311 Paint & Supplies	3	9	-	-	-
6326 Equipment Parts	76	22	1,350	1,350	1,000
6327 Misc. Equipment	32	54	250	250	45,000
6408 Contractor Fees	2,529	4,189	2,800	2,800	500
6413 Utilities	325	490	1,104	1,104	1,800
6418 Equipment Repairs & Maint.	456	122	1,850	1,850	1,100
6424 Software Support	21,102	26,046	38,755	38,755	53,870
6425 CEA Equip. Rental	2,112	2,967	8,400	8,400	11,050
Total Expense	<u>\$ 110,398</u>	<u>\$ 94,203</u>	<u>\$ 150,159</u>	<u>\$ 151,124</u>	<u>261,766</u>

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

Misc Equipment

Meters - 200 Small meters	\$ 40,000
Meters - 6 Large meters	5,000
	<u>\$ 45,000</u>

Software Support

Annual Sensus meter hosting fees	\$ 36,120
GPS Software support fees	750
AquaHawk Customer Portal	17,000
	<u>\$ 53,870</u>

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Distribution Operations and Maintenance

Business Unit 5353

PROGRAM MISSION

The department maintains the distribution mains, services, hydrants and valves to keep the system operating, reduce treated water loss and comply with PSC requirements.

PROGRAM NARRATIVE

Link to City Goals:

Implements Key Strategies # 1: "Prompt delivery of excellent services", # 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:

- Respond promptly to main breaks to minimize water loss, reduce property damage and lessen disruption of service to customers
- Meet the Public Service Commission requirements with a preventive maintenance and general upkeep schedule
- Monitor the cross connection program and the lead replacement program
- Pursue valve maintenance to comply with Public Service Commission standards

Major changes in Revenue, Expenditures or Programs:

The 2018 budget reflects the transition of wage expense back into operations. Some of the operations staff were used to complete the installation of the 27,738 new Sensus meters.

Now being back to full staff, water distribution will continue to focus on replacing and repairing mainline valves, hydrants and curb boxes in areas with corrosive soils in 2018, as well as increasing our efforts to replace lead services. Therefore, there will also be an increase the CEA equipment and other equipment rental as more of the water equipment will be used in this business unit.

The decrease in tipping fees is the result of being able to dump all spoils at MCC's Freedom Quarry site for \$2.50/ton. This will result in a significant savings in tipping fees.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Reliable source at adequate pressure					
Hydrants					
Replace/Upgrade	6	4	5	5	5
% of hydrants flushed	100%	100%	100%	100%	100%
Water loss reported	14%	13%	12%	14%	12%
Strategic Outcomes					
Reliability of the system					
# water main breaks	71	92	85	85	80
Work Process Outputs					
Preventive maintenance					
# services replaced	0	19	25	30	25
# valves exercised	796	1,506	1,340	1,600	1,500
# valves replaced	5	1	10	5	5
# curb boxes repaired	427	154	250	250	250
# joint leaks fixed	1	0	2	2	2
# of service leaks	0	2	2	2	2

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Distribution Operations and Maintenance

Business Unit 5353

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 2017	2018
Expenses					
6101 Regular Salaries	\$ 413,396	\$ 422,461	\$ 507,208	\$ 508,831	\$ 550,964
6104 Call Time	11,976	16,533	12,325	12,325	12,325
6105 Overtime	28,828	51,426	35,700	35,700	35,700
6108 Part-Time	1,455	3,699	5,760	5,760	6,060
6150 Fringes	175,425	195,869	223,823	224,064	267,496
6308 Landscape Supplies	-	576	1,000	1,000	1,000
6309 Shop Supplies & Tools	8,367	9,386	7,750	7,750	8,150
6311 Paint & Supplies	1,173	672	2,375	2,375	1,375
6316 Miscellaneous Supplies	9	22,002	-	-	-
6322 Gas Purchases	28	76	50	50	50
6325 Construction Materials	55,654	59,575	99,000	99,000	101,000
6326 Equipment Parts	75,837	63,171	91,000	91,000	86,000
6327 Miscellaneous Equipment	12,674	12,464	21,950	21,950	20,500
6328 Signs	48	1,151	-	-	-
6408 Contractor Fees	84,731	57,313	62,500	87,500	85,500
6415 Tipping Fees	31,252	9,000	25,000	25,000	20,000
6418 Equip Repairs & Maint	149	1,335	1,700	1,700	1,500
6425 CEA Equip. Rental	177,663	151,924	252,128	252,128	280,578
6503 Rent	-	1,205	500	500	1,000
6899 Other Capital Outlay	(27,376)	(26,257)	-	-	-
Total Expense	\$ 1,051,289	\$ 1,053,581	\$ 1,349,769	\$ 1,376,633	1,479,198

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

Construction Materials

Asphalt	\$ 11,000
Gravel	19,000
Slurry	7,000
Stone	2,000
Concrete	50,000
Other materials	12,000
	<u>\$ 101,000</u>

Contractor Fees

Surface restoration	\$ 68,000
Contractor services for main/valve break & repair	7,000
Hydrant painting	10,500
	<u>\$ 85,500</u>

Equipment Parts

Fittings, clamps, pipe, etc. for main/valve break repair	\$ 37,000
Valves, sleeves, boxes, pipe & connectors for service laterals/curbs	19,000
Hydrant repair parts	30,000
	<u>\$ 86,000</u>

Tipping Fees

Water main breaks	\$ 15,000
Pavement removal from in-house patch program	5,000
	<u>\$ 20,000</u>

Miscellaneous Equipment

Barricades & Cones	\$ 4,500
RP Valve Replacement	4,500
Hydrant Meter for flushing	1,000
Valve Turner	7,000
Metrotech Locators	700
Misc equipment	2,800
	<u>\$ 20,500</u>

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Distribution Capital Improvements

Business Unit 5370

PROGRAM MISSION

For the health and safety of the community, the department will identify, plan, design, prepare bid specifications and manage construction contracts to replace failing or inadequate water mains, hydrants, and services, to improve the reliability of the system, prevent system failures and reduce damage to other related infrastructure and extend water service to accommodate new growth areas.

PROGRAM NARRATIVE

Link to City Goals:

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:

Implement the 2018 watermain program
 Continue to coordinate water capital projects with other capital improvement projects
 Evaluate the needs of the system and prepare a five year plan to reflect those needs
 Replace some undersized 4 inch mains per DNR water audit
 Implement a bulk water dispensing station to provide 24/7 access

The following are 2018 CIPs:

	2018 Budget	Page
Bulk Water Dispensing System	\$ 45,000	Projects, Pg. 639
Water main construction	3,458,847	Projects, Pg. 596
	<u>\$ 3,503,847</u>	

Major changes in Revenue, Expenditures or Programs:

Water mains reconstructed shall have improved fire flows to bring flows within conformance of current international fire flow standards for residential, commercial and industrial zoning/use. Please see the project section within the capital improvement section of the budget for further information about the watermain program.

Installation of a bulk water dispensing station provide us an opportunity to gain efficiencies and improve customer service. The new system will be available during any project schedule allowing customers 24/7 access.

PERFORMANCE INDICATORS

	Actual 2015	Actual 2016	Target 2017	Projected 2017	Target 2018
Client Benefits/Impacts					
Reliable and adequate service					
% of reconstructed streets with relay	100%	100%	100%	100%	100%
# of low flow hydrants eliminated	8	5	5	5	5
Strategic Outcomes					
System size					
Miles of mains	373*	374	376	376	377
% of total miles of mains reconstructed	0.90%	0.69%	0.77%	0.77%	0.87%
# of hydrants in the City	3,344	3,361	3,300	3,358	3,368
# of low flow hydrants in the City	77	72	80	80	75
Work Process Outputs					
System expansion and improvement					
Miles of transmission lines added	0.00	0.35	0.38	0.38	0.00
Miles of existing mains re-laid	3.36	2.58	2.90	2.90	3.28

* Moved from a manual tracking system to a more comprehensives system - GIS

CITY OF APPLETON 2018 BUDGET

WATER UTILITY

Distribution Capital Improvements

Business Unit 5370

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 2017	2018
Expenses					
6101 Regular Salaries	\$ 27,805	\$ 25,485	\$ 370,395	\$ 370,395	\$ 190,445
6104 Call Time	461	103	-	-	-
6105 Overtime	5,281	6,853	10,795	10,795	5,143
6108 Part-Time	354	261	3,111	3,111	3,330
6150 Fringes	6,796	10,001	138,439	138,439	59,629
6304 Postage\Freight	1,894	8,487	-	-	-
6309 Shop Supplies & Tools	68	234	-	-	-
6320 Printing & Reproduction	717	2,098	-	-	-
6325 Construction Materials	107	-	-	-	-
6326 Equipment Parts	2,643	2,043	-	-	-
6328 Signs	565	-	-	-	-
6404 Consulting	8,878	4,192	-	-	10,000
6408 Contractor Fees	-	8,100	22,500	22,500	25,000
6425 CEA Equipment Rental	(7,521)	0	54,953	54,953	6,200
6599 Other Contracts/Obligations	150	548	-	-	-
6804 Machinery & Equipment	1,296,918	1,120,172	127,790	827,790	45,000
6809 Infrastructure Construction	2,815,918	2,209,571	3,614,364	3,830,545	3,159,100
6899 Other Capital Outlay	(4,082,326)	(3,355,444)	-	-	-
Total Expense	<u>\$ 78,708</u>	<u>\$ 42,704</u>	<u>\$ 4,342,347</u>	<u>\$ 5,258,528</u>	<u>3,503,847</u>

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

	Street	From	To	Water Utility
Labor Pool				258,547
CEA				6,200
Miscellaneous	Ballard Rd. & Northland Ave intersection			23,250
Construction	Permit; Misc.Fees; Trail	NOI, Railroad, Water Usage, County		10,000
	Surface Restoration	Due to 2017 Water CIP Excav.		25,000
	Subtotal			58,250
New Construction	Easement (Summit Park)	Laurie St	Summit St	22,800
	Easement n/o Christopher Ct	Christopher Ct	Midway Rd	10,300
	Haymeadow Ave	Bluewater Way	Spartan Ave	102,375
	Spartan Ave	Haymeadow Ave	e/o	149,300
	Spartan Ave	Richmond St	Haymeadow Ave	122,000
	Subtotal			406,775
Reconstruction	Meade St (HPZ main)	Evergreen Dr	Castlebury Dr	104,200
(not related to paving)	Rennes Easement (Union St)	First Ave	Vermont St	105,200
	Warehouse Rd	Radio Rd	Kensington Dr	163,800
	Subtotal			373,200
Reconstruction	Alvin St	Evergreen Dr	cds	89,900
(prior to next year's paving)	Ballard Rd	at Northland Ave		23,350
	Carroll St - partial only	Jackson St	Lawe St	13,250
	Center St	North St	Atlantic St	152,000
	Durkee St	Atlantic St	Summer St	247,500
	Hall St	Woodland Ave	Randall St	59,500
	McDonald St	Pershing St	Service Rd	192,000
	McDonald St	Randall St	Glendale Ave	119,200
	Roosevelt St	Morrison St	Durkee St	51,475
	Summit St	Spencer St	College Ave	156,600
	Telulah Ave	Calumet St	Marion St	654,300
	Subtotal			1,759,075
Transmission				
	Meade St (MPZ main)	Capitol Dr	Evergreen Dr	596,800
	Subtotal			596,800
Total Water Construction				3,458,847

Machinery & Equipment

Bulk Water Dispensing Station	\$ 45,000
	<u>\$ 45,000</u>

Description	2015 Actual	2016 Actual	2017 YTD Actual	2017 Adopted Budget	2017 Amended Budget	2018 Requested Budget	2018 Adopted Budget
REVENUES							
Permits	315	210	105	500	500	200	200
Interest Income	156,814	132,716	264,871	300,000	300,000	275,000	250,000
Charges for Services	20,470,214	20,617,927	14,174,087	20,489,500	20,489,500	20,505,500	20,505,500
Other Revenues	962,591	1,279,557	680,506	1,658,046	1,658,046	1,626,882	1,655,882
TOTAL REVENUES	21,589,934	22,030,410	15,119,569	22,448,046	22,448,046	22,407,582	22,411,582
EXPENSES BY LINE ITEM							
Regular Salaries	299,906	317,975	242,387	355,483	365,101	354,556	354,556
Labor Pool Allocations	1,124,452	1,194,668	1,111,585	1,883,822	1,883,822	1,777,816	1,777,816
Call Time	15,003	18,978	9,056	16,597	16,597	16,534	16,534
Overtime	137,184	152,708	83,396	149,267	149,267	143,619	131,119
Temp. Full-Time	200	0	0	0	0	0	0
Part-Time	17,615	14,507	8,653	15,584	15,584	12,188	12,188
Other Compensation	11,419	8,623	7,850	11,245	11,245	11,135	11,135
Shift Differential	2,209	2,499	1,421	2,503	2,503	2,490	2,490
Sick Pay	6,119	13,252	37,266	0	0	0	0
Vacation Pay	215,293	210,457	170,760	0	0	0	0
Fringes	612,259	715,716	580,205	860,964	862,393	856,985	855,140
Pension expense / revenue	11,231-	127,442	0	0	0	0	0
Salaries & Fringe Benefits	2,430,428	2,776,825	2,252,579	3,295,465	3,306,512	3,175,323	3,160,978
Training & Conferences	2,776	5,185	2,197	14,800	14,800	13,500	13,500
Memberships & Licenses	8,006	8,444	8,647	8,720	8,720	8,870	8,870
Postage & Freight	23,851	28,350	14,637	23,410	23,410	25,550	25,550
Awards & Recognition	665	791	289	875	875	875	875
Building Maintenance/Janitor.	4,110	4,467	3,187	4,811	4,811	4,700	4,700
Food & Provisions	436	316	0	280	280	280	280
Interfund Allocations	0	480-	1,135-	0	0	0	0
Insurance	109,172	111,462	99,333	132,450	132,450	133,750	127,710
Rent	0	1,205	0	500	500	1,000	1,000
Depreciation Expense	4,353,070	4,517,926	3,631,254	5,065,000	5,065,000	5,065,000	5,065,000
Uncollectible Accounts	6,752	3,935	1,374	8,000	8,000	8,000	8,000
Bond Interest Payments	2,708,421	2,861,629	1,474,074	2,165,315	2,165,315	2,024,665	2,021,665
Debt Issuance Costs	296,109	286,749	14,500	85,000	85,000	85,000	85,000
Gain/Loss on Refund Amort.	145,615	209,559	172,296	229,729	229,729	273,727	273,727
Trans Out - General Fund	1,894,688	1,854,086	1,443,600	2,025,800	2,025,800	2,013,800	2,013,800
Trans Out - Capital Projects	8,988	0	0	0	0	0	0
Administrative Expense	9,562,659	9,893,624	6,864,253	9,764,690	9,764,690	9,658,717	9,649,677
Landscape Supplies	0	576	338	1,000	1,000	1,000	1,000
Shop Supplies & Tools	22,427	26,127	13,211	22,350	22,350	25,600	25,600
Chemicals	1,334,340	1,322,812	739,367	1,400,000	1,400,000	1,369,000	1,369,000
Treatment Chemicals	2,822	1,974	958	3,700	3,700	3,500	3,500
Paint & Supplies	1,176	681	381	2,375	2,375	1,375	1,375
Miscellaneous Supplies	292	22,360	0	0	0	0	0
Materials	183,797	11,977	504	62,000	62,000	0	0
Printing & Reproduction	14,505	17,201	5,641	16,652	16,652	15,900	15,900
Clothing	3,495	2,986	1,863	4,100	4,100	4,100	4,100
Gas Purchases	4,634	12,443	5,483	5,050	5,050	10,050	10,050
Safety Supplies	18,109	2,577	5,674	7,100	7,100	7,100	7,100
Medical & Lab Supplies	65,754	62,945	29,912	74,050	74,050	38,950	38,950
Construction Materials	55,836	59,575	58,936	99,000	99,000	101,000	101,000
Vehicle & Equipment Parts	78,555	66,065	59,522	92,350	92,350	129,000	129,000
Miscellaneous Equipment	48,016	37,490	26,906	74,980	82,980	93,950	116,450
Signs	612	1,150	884	0	0	0	0
Supplies & Materials	1,834,370	1,648,939	949,580	1,864,707	1,872,707	1,800,525	1,823,025
Accounting/Audit	11,317	11,140	0	12,020	12,020	0	9,360
Legal Fees	17,896	22,467	0	22,000	22,000	23,000	23,000
Bank Services	21,879	22,034	13,102	23,000	23,000	23,000	23,000
Consulting Services	187,186	87,854	33,345	155,500	190,763	970,000	270,000
Collection Services	1,506	1,933	1,572	2,550	2,550	2,850	2,850

Description	2015 Actual	2016 Actual	2017 YTD Actual	2017 Adopted Budget	2017 Amended Budget	2018 Requested Budget	2018 Adopted Budget
Contractor Fees	399,277	216,867	82,674	1,677,300	1,877,300	660,990	660,990
Temporary Help	276	0	0	0	0	0	0
Advertising	0	0	0	1,600	1,600	1,000	1,000
Tipping Fees	31,252	9,000	6,995	25,000	25,000	20,000	20,000
Health Services	38	0	0	50	50	50	50
Lab Fees	0	16,849	4,597	0	0	20,300	20,300
Snow Removal Services	241	5,520	1,421	3,250	3,250	5,000	5,000
Other Contracts/Obligations	27,494	27,908	22,608	28,055	28,055	32,842	32,815
Purchased Services	698,362	421,572	166,314	1,950,325	2,185,588	1,759,032	1,068,365
Electric	686,159	675,874	419,220	698,790	698,790	643,970	643,970
Gas	128,827	96,467	70,495	129,150	129,150	111,790	111,790
Water	134,189	131,758	92,856	143,980	143,980	144,120	144,120
Waste Disposal/Collection	24,181	18,196	11,865	21,690	21,690	21,790	21,790
Fuel Oil	1,690,091	1,723,015	1,013,563	2,000,000	2,000,000	1,850,000	1,850,000
Stormwater	23,004	24,928	17,398	23,595	23,595	26,366	26,366
Telephone	16,493	16,713	12,717	17,760	17,760	17,760	17,760
Cellular Telephone	5,793	8,405	7,012	7,824	7,824	10,050	10,050
Utilities	2,708,737	2,695,356	1,645,126	3,042,789	3,042,789	2,825,846	2,825,846
Building Repair & Maintenance	154,198	412,349	105	0	0	70,000	70,000
Equipment Repair & Maintenan	66,523	39,571	12,383	33,550	33,550	57,600	57,600
Communications Equip. Repairs	180	0	0	0	0	0	0
Facilities Charges	238,428	265,747	123,264	272,527	272,527	290,589	290,589
Software Support	24,994	40,487	71,300	53,755	53,755	70,110	70,110
CEA Equipment Rental	191,561	179,913	223,589	335,879	335,879	320,358	320,358
Grounds Repair & Maintenance	5,479	6,286	5,127	5,500	5,500	7,500	7,500
Repair & Maintenance	681,363	944,353	435,768	701,211	701,211	816,157	816,157
Land Improvements	68,593	0	101,637	125,000	125,000	0	0
Buildings	55,109	125,101	0	0	0	0	0
Machinery & Equipment	3,040,004	2,623,190	23,137	157,790	865,993	120,000	120,000
Infrastructure Construction	2,815,918	2,209,571	2,599,522	3,614,364	3,830,545	3,159,100	3,159,100
Other Capital Outlay	6,340,867-	5,167,714-	0	0	0	0	0
Capital Expenditures	361,243-	209,852-	2,724,296	3,897,154	4,821,538	3,279,100	3,279,100
TOTAL EXPENSES	17,554,676	18,170,817	15,037,916	24,516,341	25,695,035	23,314,700	22,623,148
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CITY OF APPLETON 2018 BUDGET

WATER UTILITY

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS

	2015 Actual	2016 Actual	2017 Budget	2017 Projected	2018 Budget
Revenues					
Charges for Services	\$ 20,470,214	\$ 20,617,927	\$ 20,489,500	\$ 20,400,000	\$ 20,505,500
Miscellaneous	538,665	599,764	603,000	609,000	622,200
Total Revenues	<u>21,008,879</u>	<u>21,217,691</u>	<u>21,092,500</u>	<u>21,009,000</u>	<u>21,127,700</u>
Expenses					
Operation and Maintenance	8,078,526	8,440,868	9,512,150	9,539,297	8,960,109
Depreciation	4,353,070	4,517,926	5,065,000	4,985,000	5,065,000
Total Expenses	<u>12,431,596</u>	<u>12,958,794</u>	<u>14,577,150</u>	<u>14,524,297</u>	<u>14,025,109</u>
Operating Income (Loss)	8,577,283	8,258,897	6,515,350	6,484,703	7,102,591
Non-Operating Revenues (Expenses)					
Investment Income	156,814	132,716	300,000	275,000	250,000
Interest Expense	(2,708,421)	(2,861,629)	(2,165,315)	(2,145,115)	(2,021,665)
Gain/Loss on Refunding	(145,615)	(209,559)	(229,729)	(229,729)	(273,727)
Gain/Loss on Asset Disposal	(327,585)	-	-	-	-
Amortization of Premium on Debt	244,475	319,443	348,096	660,997	716,132
Debt Issue Costs	(296,109)	(286,749)	(85,000)	-	(85,000)
Other	4,970	4,753	5,000	5,000	5,000
Total Non-Operating	<u>(3,071,471)</u>	<u>(2,901,025)</u>	<u>(1,826,948)</u>	<u>(1,433,847)</u>	<u>(1,409,260)</u>
Net Income Before Contributions and Transfers	5,505,812	5,357,872	4,688,402	5,050,856	5,693,331
Contributions and Transfers In (Out)					
Capital Contributions	502,381	355,807	702,450	342,622	312,750
General Fund	(22,788)	(13,800)	(13,800)	(13,800)	(13,800)
Tax Equivalent	(1,950,147)	(1,840,286)	(2,012,000)	(1,916,440)	(2,000,000)
Capital Projects	-	-	-	-	-
Change in Net Assets	4,035,258	3,859,593	3,365,052	3,463,238	3,992,281
Net Assets - Beginning	<u>75,680,742</u>	<u>79,716,000</u>	<u>83,575,593</u>	<u>83,575,593</u>	<u>87,038,831</u>
Net Assets - Ending	<u>\$ 79,716,000</u>	<u>\$ 83,575,593</u>	<u>\$ 86,940,645</u>	<u>\$ 87,038,831</u>	<u>\$ 91,031,112</u>

* as restated

SCHEDULE OF CASH FLOWS

Working Cash - Beginning of Year	\$ 11,366,875	\$ 6,187,597
+ Change in Net Assets	3,463,238	3,992,281
- Capital Contributions	(342,622)	-
+ Depreciation	4,985,000	5,065,000
+ Long Term Debt	-	3,800,000
- Fixed Assets	(6,384,894)	(4,203,847)
- Principal Repayment	<u>(6,900,000)</u>	<u>(6,585,000)</u>
Working Cash - End of Year	<u>\$ 6,187,597</u>	<u>\$ 8,256,031</u>

**CITY OF APPLETON 2018 BUDGET
WATER UTILITY
CALCULATION OF RATE INCREASE DOCUMENTATION**

	2017 Budget	2017 Projected	2018 Budget	2019 Projected	2020 Projected	2021 Projected	2022 Projected
Revenues							
Charges for Services	\$20,489,500	\$20,400,000	\$20,505,500	\$ 20,608,028	\$ 20,711,068	\$ 20,814,623	\$ 20,918,696
Miscellaneous	603,000	609,000	622,200	634,644	647,337	660,284	673,489
Total Revenues	<u>21,092,500</u>	<u>21,009,000</u>	<u>21,127,700</u>	<u>21,242,672</u>	<u>21,358,405</u>	<u>21,474,907</u>	<u>21,592,185</u>
Expenses							
Operating Expenses	9,512,150	9,539,297	8,960,109	9,953,912	9,830,780	10,265,703	10,108,674
Depreciation	5,065,000	4,985,000	5,065,000	5,265,000	5,465,000	5,690,000	5,915,000
Total Expenses	<u>14,577,150</u>	<u>14,524,297</u>	<u>14,025,109</u>	<u>15,218,912</u>	<u>15,295,780</u>	<u>15,955,703</u>	<u>16,023,674</u>
Operating Income	6,515,350	6,484,703	7,102,591	6,023,759	6,062,625	5,519,204	5,568,511
Non-Operating Revenues (Expenses)							
Interest Income	300,000	275,000	250,000	200,000	200,000	200,000	200,000
Interest Expense	(2,165,315)	(2,145,115)	(2,021,665)	(1,972,765)	(1,906,765)	(1,947,115)	(1,803,315)
Gain/Loss on Refunding	(229,729)	(229,729)	(273,727)	(245,210)	(212,552)	(179,806)	(146,991)
Amortization of Debt Premium	348,096	660,997	716,132	625,199	509,650	383,341	256,901
Debt Issuance Expense	(85,000)	-	(85,000)	(80,000)	(100,000)	(80,000)	(80,000)
Other	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Total Non-Operating	<u>(1,826,948)</u>	<u>(1,433,847)</u>	<u>(1,409,260)</u>	<u>(1,467,777)</u>	<u>(1,504,667)</u>	<u>(1,618,580)</u>	<u>(1,568,405)</u>
Net Income Before Transfers	4,688,402	5,050,856	5,693,331	4,555,982	4,557,958	3,900,623	4,000,106
Contributions and Transfers In (Out)							
Capital Contributions	702,450	342,622	312,750	-	159,080	-	-
Trans Out - General Fund	(13,800)	(13,800)	(13,800)	(13,800)	(13,800)	(13,800)	(13,800)
Tax Equivalent	(2,012,000)	(1,916,440)	(2,000,000)	(2,150,000)	(2,300,000)	(2,450,000)	(2,600,000)
Capital Projects	-	-	-	-	-	-	-
Change in Net Assets	3,365,052	3,463,238	3,992,281	2,392,182	2,403,238	1,436,823	1,386,306
Total Net Assets - Beginning	<u>83,575,593</u>	<u>83,575,593</u>	<u>87,038,831</u>	<u>91,031,112</u>	<u>93,423,294</u>	<u>95,826,532</u>	<u>97,263,355</u>
Total Net Assets - Ending	<u>\$86,940,645</u>	<u>\$87,038,831</u>	<u>\$91,031,112</u>	<u>\$ 93,423,294</u>	<u>\$ 95,826,532</u>	<u>\$ 97,263,355</u>	<u>\$ 98,649,661</u>

SCHEDULE OF CASH FLOWS

Cash - Beginning of the Year	11,366,875	6,187,597	8,256,031	8,085,202	6,019,918	4,694,186
+ Change in Net Assets	3,463,238	3,992,281	2,392,182	2,403,238	1,436,823	1,386,306
+ Depreciation	4,985,000	5,065,000	5,265,000	5,465,000	5,690,000	5,915,000
+ Long Term Debt	-	3,800,000	3,300,000	8,700,000	3,500,000	3,000,000
- Contributed Capital	(342,622)	-	-	(159,080)	-	-
- Fixed Assets	(6,384,894)	(4,203,847)	(4,328,011)	(11,629,442)	(4,767,555)	(4,065,607)
- Principal Repayment	(6,900,000)	(6,585,000)	(6,800,000)	(6,845,000)	(7,185,000)	(3,585,000)
Working Cash - End of Year	<u>\$ 6,187,597</u>	<u>\$ 8,256,031</u>	<u>\$ 8,085,202</u>	<u>\$ 6,019,918</u>	<u>\$ 4,694,186</u>	<u>\$ 7,344,885</u>
25% Working Capital Reserve (prior year's audited expenses)		3,400,213	3,245,444	3,519,169	3,509,386	3,665,705
Coverage Ratio	1.40	1.47	1.38	1.37	1.30	1.25

ASSUMPTIONS:

Borrow 75% of capital expenditures as detailed in the five year plan for years 2018-2022
Interest rate at 4% twenty year term for all future debt issues
Revenue increases of 1/2% per year for additional customer base
Operating expenses to increase 3.0% per year after 2018
Includes in O&M expense for painting of the North Reservoir at a cost of \$675,000 in 2017, of the Lindbergh Standpipe at a cost of \$725,000 in 2019, of the Ridgeway Tower at a cost of \$325,000 in 2020 and of the Matthias Tower at a cost of \$465,000 in 2021
Maintain a level of 25% working capital reserve and 1.10 coverage ratio as required by bond covenants

RESULTS:

Rates should be monitored on an annual basis for adjustment based on actual results or changes in circumstances. The projections are shown with the current rates and no adjustments for any approved rate increase by the Public Service Commission. A rate study would be completed in the year prior to any rate increase; that rate increase would require PSC approval prior to implementation. The current water rates were effective 12/30/2010.

CITY OF APPLETON 2018 BUDGET
WATER UTILITY
LONG TERM DEBT

	2008		2011		2012	
	Revenue Bonds		Revenue Bonds		Revenue Bonds	
	Principal	Interest	Principal	Interest	Principal	Interest
2018	720,000	-	140,000	94,610	110,000	61,605
2019	-	-	145,000	90,260	115,000	58,155
2020	-	-	150,000	84,260	120,000	54,555
2021	-	-	155,000	78,060	125,000	50,805
2022	-	-	160,000	71,660	125,000	47,055
2023	-	-	170,000	64,860	130,000	43,155
2024	-	-	175,000	57,860	135,000	39,105
2025	-	-	180,000	50,660	140,000	34,765
2026	-	-	190,000	43,060	145,000	30,270
2027	-	-	195,000	35,260	145,000	25,775
2028	-	-	205,000	27,060	150,000	21,125
2029	-	-	215,000	18,460	155,000	16,088
2030	-	-	220,000	9,660	160,000	10,888
2031	-	-	230,000	-	165,000	5,525
2032	-	-	-	-	170,000	-
	<u>\$ 720,000</u>	<u>\$ -</u>	<u>\$ 2,530,000</u>	<u>\$ 725,730</u>	<u>\$ 2,090,000</u>	<u>\$ 498,871</u>

	2013		2014		2015	
	Revenue Bonds		Revenue Bonds		Revenue Bonds	
	Principal	Interest	Principal	Interest	Principal	Interest
2018	295,000	250,850	160,000	123,100	215,000	179,800
2019	300,000	241,850	165,000	119,800	220,000	173,200
2020	310,000	232,550	165,000	114,850	230,000	166,300
2021	320,000	219,750	170,000	109,750	235,000	159,250
2022	335,000	206,350	175,000	104,500	240,000	152,050
2023	350,000	192,350	180,000	99,100	250,000	142,050
2024	365,000	177,750	190,000	93,400	260,000	131,650
2025	380,000	162,550	195,000	85,600	270,000	120,850
2026	395,000	145,388	200,000	77,600	280,000	112,450
2027	410,000	127,588	210,000	69,200	290,000	103,750
2028	430,000	108,938	220,000	60,400	300,000	91,750
2029	450,000	89,250	230,000	51,200	310,000	79,350
2030	470,000	68,688	235,000	41,800	325,000	66,350
2031	490,000	47,250	245,000	32,000	340,000	52,750
2032	515,000	24,075	255,000	21,800	350,000	41,375
2033	535,000	-	265,000	11,200	365,000	26,775
2034	-	-	280,000	-	375,000	13,650
2035	-	-	-	-	390,000	-
	<u>\$ 6,350,000</u>	<u>\$ 2,295,177</u>	<u>\$ 3,540,000</u>	<u>\$ 1,215,300</u>	<u>\$ 5,245,000</u>	<u>\$ 1,813,350</u>

	2015		2016		2016		TOTAL		
	Refunding Bonds		Revenue Bonds		Refunding Bonds		Principal	Interest	Total
	Principal	Interest	Principal	Interest	Principal	Interest			
2018	800,000	557,900	135,000	114,400	4,325,000	601,400	6,900,000	1,983,665	8,883,665
2019	1,570,000	510,800	135,000	110,350	3,935,000	483,350	6,585,000	1,787,765	8,372,765
2020	1,615,000	462,350	140,000	104,750	4,070,000	320,550	6,800,000	1,540,165	8,340,165
2021	1,665,000	412,400	145,000	98,950	3,920,000	163,750	6,735,000	1,292,715	8,027,715
2022	1,720,000	360,800	150,000	92,950	4,075,000	750	6,980,000	1,036,115	8,016,115
2023	1,775,000	289,800	160,000	88,150	15,000	300	3,030,000	919,765	3,949,765
2024	1,850,000	215,800	160,000	83,350	10,000	-	3,145,000	798,915	3,943,915
2025	1,920,000	139,000	165,000	78,400	-	-	3,250,000	671,825	3,921,825
2026	1,990,000	79,300	170,000	73,300	-	-	3,370,000	561,368	3,931,368
2027	1,110,000	46,000	180,000	66,100	-	-	2,540,000	473,673	3,013,673
2028	1,150,000	-	185,000	58,700	-	-	2,640,000	367,973	3,007,973
2029	-	-	195,000	50,900	-	-	1,555,000	305,248	1,860,248
2030	-	-	200,000	42,900	-	-	1,610,000	240,286	1,850,286
2031	-	-	210,000	34,500	-	-	1,680,000	172,025	1,852,025
2032	-	-	215,000	28,050	-	-	1,505,000	115,300	1,620,300
2033	-	-	225,000	21,300	-	-	1,390,000	59,275	1,449,275
2034	-	-	230,000	14,400	-	-	885,000	28,050	913,050
2035	-	-	235,000	7,350	-	-	625,000	7,350	632,350
2036	-	-	245,000	-	-	-	245,000	-	245,000
	<u>\$ 17,165,000</u>	<u>\$ 3,074,150</u>	<u>\$ 3,480,000</u>	<u>\$ 1,168,800</u>	<u>\$ 20,350,000</u>	<u>\$ 1,570,100</u>	<u>\$ 61,470,000</u>	<u>\$ 12,361,478</u>	<u>\$ 73,831,478</u>

Note: Schedule is based on accrual method of accounting. Revenue bonds in the amount of \$3,800,000 will be issued in 2018. Expected interest expense of the issue in 2018 is \$38,000 at 4%.

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

CITY OF APPLETON 2018 BUDGET WASTEWATER UTILITY

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.

CITY OF APPLETON 2018 BUDGET WASTEWATER UTILITY

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 quality 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 quality 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

DEPARTMENT BUDGET SUMMARY

Programs		Actual		Budget			%
Unit	Title	2015	2016	Adopted 2017	Amended 2017	2018	Change *
Program Revenues		\$ 11,961,241	\$ 12,005,596	\$ 11,615,353	\$ 11,615,353	\$ 11,534,806	-0.69%
Program Expenses							
5411	Utility Administration	741,943	249,548	264,520	266,409	288,644	9.12%
5412	Finance Administration	4,732,755	4,709,778	5,271,627	5,271,627	5,029,876	-4.59%
5422	Treatment	3,501,993	3,580,557	3,721,007	3,831,283	3,862,350	3.80%
5423	Biosolids Management	554,053	587,180	779,572	783,821	679,240	-12.87%
5425	Lift Stations	87,547	133,453	184,859	184,859	127,799	-30.87%
5427	Collection Systems	898,399	736,302	837,224	931,145	753,166	-10.04%
5431	Public Works Capital	548,563	386,226	3,484,804	4,167,736	2,235,551	-35.85%
5432	Utility Capital	131,705	82,441	4,081,500	4,321,961	3,364,250	-17.57%
Total Program Expenses		\$ 11,196,958	\$ 10,465,485	\$ 18,625,113	\$ 19,758,841	\$ 16,340,876	-12.26%
Expenses Comprised Of:							
	Personnel	2,121,562	2,512,687	2,514,892	2,524,598	2,594,783	3.18%
	Administrative Expense	5,025,608	4,281,424	5,036,522	5,036,522	4,792,672	-4.84%
	Supplies & Materials	366,776	396,408	460,805	460,805	584,550	26.85%
	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:							
	Personnel allocated to programs	28.71	28.39	28.41	28.41	28.71	

* % change from prior year adopted budget

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

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.

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:

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.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Safe work environment					
# of workers comp. claims / year	0	2	0	0	0
# of first aid entries per year	13	10	0	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 per employee	16	11	25	25	25
Work Process Outputs					
Government reports prepared					
# reports filed:					
Compliance Report (eCMAR)	1	1	1	1	1
Biosolids Annual Report	1	1	1	1	1
Pretreatm't Report	2	2	2	2	2
Discharge Report (eDMR)	12	12	12	12	12

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

Utility Administration

Business Unit 5411

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 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	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	<u>\$ 11,959,105</u>	<u>\$ 12,030,525</u>	<u>\$ 11,587,300</u>	<u>\$ 11,587,300</u>	<u>\$ 11,506,550</u>
Expenses					
6101 Regular Salaries	\$ 136,068	\$ 143,558	\$ 150,455	\$ 152,100	\$ 161,602
6104 Call Time	13	14	-	-	-
6105 Overtime	105	329	2,327	2,327	2,393
6108 Part-Time	5,726	1,663	1,472	1,472	2,362
6150 Fringes	40,825	45,318	47,811	48,055	53,320
6201 Training\Conferences	4,188	9,000	7,780	7,780	7,500
6301 Office Supplies	3,712	2,773	3,000	3,000	3,000
6302 Subscriptions	74	267	100	100	100
6303 Memberships & Licenses	2,858	2,139	4,055	4,055	7,040
6304 Postage\Freight	3,160	568	2,500	2,500	2,500
6305 Awards & Recognition	65	350	300	300	300
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	145	-	-	-
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	3,750	3,750	3,750
6411 Temporary Help	276	-	-	-	-
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	-	-	-
6425 CEA Equip. Rental	2,798	3,386	2,790	2,790	3,207
7915 Trans Out - Stormwater	500,000	-	-	-	-
Total Expense	<u>\$ 741,943</u>	<u>\$ 249,548</u>	<u>\$ 264,520</u>	<u>\$ 266,409</u>	<u>\$ 288,644</u>

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

None

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

Finance Administration

Business Unit 5412

PROGRAM MISSION

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

PROGRAM NARRATIVE

Link to City Goals:

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

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Timely and accurate posting of overhead expenses					
% of months posted within 10 days of end of month	50%	75%	92%	83%	92%
Strategic Outcomes					
Maintain compliance with GAAP					
# of audit compliance issues not raised by staff	0	0	0	0	0
Work Process Outputs					
# of monthly bills processed	113,384	113,932	114,000	114,000	114,000

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

Finance Administration

Business Unit 5412

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 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
	<u>\$ (11,747)</u>	<u>\$ (38,257)</u>	<u>\$ 18,053</u>	<u>\$ 18,053</u>	<u>\$ 17,256</u>
Expenses					
6101 Regular Salaries	\$ 103,820	\$ 105,081	\$ 114,448	\$ 114,448	\$ 114,040
6105 Overtime	318	298	-	-	-
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	<u>\$ 4,732,755</u>	<u>\$ 4,709,778</u>	<u>\$ 5,271,627</u>	<u>\$ 5,271,627</u>	<u>\$ 5,029,876</u>

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

<u>Postage/Freight</u>		<u>Meter Expense</u>	
City Service Invoice postage	\$ 22,500	Allocation from Water	\$ 108,500
City Service Invoice folding/inserting	1,500	Meter depreciation	230,000
	<u>\$ 24,000</u>	Meter payment in lieu of tax	69,000
		Return on investment in net fixed assets - meters	222,500
<u>Bank Services</u>			<u>\$ 630,000</u>
Banking & Investment Fees	\$ 21,500		
	<u>\$ 21,500</u>		
<u>Billing Services</u>			
Sewer charges from other sanitation districts for Appleton residences served	\$ 69,000		
	<u>\$ 69,000</u>		

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

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.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Environmental Safety					
# of Discharge Monthly Report (DMR) permit exceedance/violations	0	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	0
Increase revenue sources					
\$ received from other sources	\$ 1,473,124	\$ 2,161,440	\$ 750,000	\$ 2,300,000	\$ 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	A	A	A	A	A
Overall CMAR GPA	3.73	3.73	4.00	3.73	4.00
# of categorical grades of C or below	0	0	0	1	0
Public Outreach Initiatives					
# of pollution minimization initiatives	4	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 Monitoring Report (DMR)					
# 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					
# of inspections	10	10	10	10	10
# of sampling events	20	20	20	20	20
# of billable samples for other City departments	572	503	550	350	350
* includes all compliance, process and billing samples					

CITY OF APPLETON 2018 BUDGET WASTEWATER UTILITY

Treatment

Business Unit 5422

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 2017	2018
Expenses					
6101 Regular Salaries	\$ 884,544	\$ 983,893	\$ 997,469	\$ 1,003,281	\$ 994,788
6104 Call Time	1,613	2,527	3,061	3,061	3,106
6105 Overtime	54,349	60,303	63,577	63,577	74,612
6108 Part-Time	7,530	7,632	9,082	9,082	9,398
6150 Fringes	332,515	388,175	374,821	375,685	408,640
6309 Shop Supplies & Tools	28,068	32,384	42,500	42,500	28,000
6310 Chemicals	251,624	230,936	315,000	315,000	335,000
6321 Clothing	5,264	5,185	5,905	5,905	5,500
6322 Gas Purchases	6,247	5,766	8,000	8,000	8,250
6324 Medical / Lab Supplies	20,578	20,239	20,000	20,000	21,000
6326 Repair Parts	-	-	-	-	110,000
6327 Miscellaneous Equipment	11,261	47,711	13,200	13,200	24,000
6402 Legal Fees	28,931	26,729	29,700	29,700	29,250
6404 Consulting Services	40,257	5,750	80,000	180,000	38,000
6408 Contractor Fees	117,475	180,054	124,900	128,500	169,750
6413 Utilities	1,050,726	978,123	1,026,915	1,026,915	1,021,915
6415 Tipping Fees	3,292	2,761	3,500	3,500	3,500
6416 Building Repairs & Maint.	-	-	-	-	35,000
6418 Equipment Repairs & Maint	169,073	203,138	102,000	102,000	30,500
6420 Facilities Charges	468,466	379,065	448,221	448,221	446,045
6424 Software Support	16,460	12,977	14,300	14,300	14,300
6425 CEA Equip. Rental	18,731	18,448	16,916	16,916	19,821
6432 Lab Fees	1,114	1,139	2,000	2,000	15,000
6440 Snow Removal Services	3,401	2,950	3,500	3,500	3,500
6454 Grounds Repair & Maint	9,343	5,286	7,500	7,500	7,500
6599 Other Contracts/Obligations	8,681	7,211	8,940	8,940	5,975
6899 Other Capital Outlay	(37,550)	(27,825)	-	-	-
Total Expense	\$ 3,501,993	\$ 3,580,557	\$ 3,721,007	\$ 3,831,283	\$ 3,862,350

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

<u>Legal Fees</u>		<u>Chemicals</u>	
DNR Fees	\$ 29,250	Iron salts	\$ 120,000
	<u>\$ 29,250</u>	DAF polymer	25,000
		BFP coagulant	120,000
<u>Contractor Fees</u>		Sodium hypochlorite	32,000
Cogen maintenance	\$ 3,000	Sodium bisulfite	32,000
Pipe insulation replacement	7,500	Other chemicals	6,000
Painting of process piping	30,000		<u>\$ 335,000</u>
Well abandonment	5,000		
Struvite removal	10,000	<u>Equipment Repairs & Maintenance</u>	
Grit removal	3,250	Compressor repairs	\$ 2,500
Safety inspections	8,000	Lab equipment repairs	1,500
Lab equipment inspections	3,000	Generator maintenance	1,500
DAF component replacement	100,000	Repair service calls	25,000
	<u>\$ 169,750</u>		<u>\$ 30,500</u>
<u>Consulting Services</u>		<u>Shop Supplies & Tools</u>	
Filtrate line review	\$ 15,000	Shop supplies	\$ 5,000
Air compressor study	7,500	Batteries	2,000
Concrete repairs on tanks	8,000	Supply bin parts	15,000
Miscellaneous engineering studies	7,500	Small hand tools	6,000
	<u>\$ 38,000</u>		<u>\$ 28,000</u>
<u>Repair Parts</u>		<u>Miscellaneous Equipment</u>	
Pumps & Motors	\$ 50,000	SCADA components	\$ 2,000
Valves, piping and bearings	40,000	Radar level instruments	13,000
Inventory management	20,000	Lab equipment	9,000
	<u>\$ 110,000</u>		<u>\$ 24,000</u>
<u>Building Repairs & Maintenance</u>			
Receiving Station concrete	\$ 35,000		
	<u>\$ 35,000</u>		

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

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.

PROGRAM NARRATIVE

Link to City Key Strategies:

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 Outagamie 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.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<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	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					
# of site monitorings completed	49	42	24	24	40

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

Biosolids Management

Business Unit 5423

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 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	<u>\$ 554,053</u>	<u>\$ 587,180</u>	<u>\$ 779,572</u>	<u>\$ 783,821</u>	<u>\$ 679,240</u>

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

Contractor Fees

Compost pad processing	80,000
Biosolids transport / application	375,000
Biosolids incorporation	25,000
	<u>\$ 480,000</u>

Other Contracts/Obligations

City staff hauling to compost site	\$ 19,000
City staff brush handling	21,000
Pad maintenance by City staff	8,000
	<u>\$ 48,000</u>

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

Lift Stations

Business Unit 5425

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.

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:

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.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Sewage bypasses / backups # per year attributed to lift stations	0	0	0	0	0
Strategic Outcomes					
Integrity of lift stations maintained # of emergency calls required	11	10	15	15	5
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

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

Lift Stations

Business Unit 5425

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 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	<u>\$ 87,547</u>	<u>\$ 133,453</u>	<u>\$ 184,859</u>	<u>\$ 184,859</u>	<u>\$ 127,799</u>

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

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

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.

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:

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:

	2018 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
	<u>\$ 3,364,250</u>	

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.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
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%

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

Utility Capital Improvements

Business Unit 5432

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 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

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

Consulting Services

Electrical distribution upgrades	\$ 40,000
Belt filter press upgrades	70,000
Marshall Heights lift station	30,000
	<u>\$ 140,000</u>

Other Contracts/Obligations

PLC and SCADA maintenance	\$ 20,000
	<u>\$ 20,000</u>

Buildings

H-building new water line	\$ 30,000
Electrical distribution upgrades	1,430,750
S-building air handling units upgrades	250,000
	<u>\$ 1,710,750</u>

Equipment

Marshall Heights lift station	\$ 120,000
PLC and SCADA maintenance	138,500
	<u>\$ 258,500</u>

Land Improvements

Roadway Replacement	\$ 290,000
Landscaping	25,000
	<u>\$ 315,000</u>

Contractor Fees

Aeration blower replacement	\$ 920,000
	<u>\$ 920,000</u>

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

Collection Systems

Business Unit 5427

PROGRAM MISSION

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

PROGRAM NARRATIVE

Link to City Goals:

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.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
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

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

Collection Systems

Business Unit 5427

PROGRAM BUDGET SUMMARY

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

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

Construction Materials

Castings	\$ 7,500
Concrete	6,300
Other Materials	2,200
	<u>\$ 16,000</u>

Consulting Services

Sewer TV & cleaning	\$ 150,000
Flow monitoring - Kensington	4,000
Lateral Televising	10,000
	<u>\$ 164,000</u>

Contractor Fees

Surface restoring -prior year repairs	\$ 25,000
Spot repair liners	20,000
Unanticipated failures	20,000
Misc Fees	1,000
	<u>\$ 66,000</u>

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

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.

PROGRAM NARRATIVE

Link to City Goals:

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:

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

Major changes in Revenue, Expenditures or Programs:

No major change.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Reduction of wastewater treatment cost					
# of manholes - rehab/rebuilt	23	34	25	25	25
Collection system rating from CMAR	A	A	A	A	A
# 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*	324
% of total miles of sanitary sewer reconstructed	0.46%	0.60%	0.52%	0.52%	0.50%
Work Process Outputs					
Restoration of sanitary sewers					
Miles of existing sanitary sewer reconstruction	1.47	1.95	1.70	1.70	1.84
Expansion of sanitary sewer system					
Miles of new sanitary sewer added	0.49	1.04	0.23	0.23	0.69
Reduction of treatment costs					
# of seals installed	94	94	100	100	100

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

CITY OF APPLETON 2018 BUDGET

WASTEWATER UTILITY

Public Works Capital Improvements

Business Unit 5431

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 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	<u>\$ 548,563</u>	<u>\$ 386,226</u>	<u>\$ 3,484,804</u>	<u>\$ 4,167,736</u>	<u>\$ 2,235,551</u>

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

	Street	From	To	Waste-water Utility
Labor Pool				158,325
CEA				7,400
Consultant	Lawe St - South Island St river crossing force main			50,000
	Subtotal			50,000
Miscellaneous	Sanitary Laterals & Manholes Prior To 2018 Asphalt			47,493
Construction	Sanitary Laterals & Manholes Prior To 2018 Concrete			32,647
	Structure Rehabilitation / Sewer Cut repairs from 2017			40,000
	Subtotal			120,140
New Construction	Haymeadow Ave	Bluewater Way	Spartan Ave	107,350
	Spartan Ave	Haymeadow Ave	e/o	101,700
	Spartan Ave	Richmond St	Sommers Dr	203,400
	Subtotal			412,450
Reconstruction - liner	Calumet St	Lawe St	Carpenter St, 92' w/o	44,660
	Easement - Outagamie and Highcrest	Cedar St	Reid Dr	17,131
	Harris St	Douglas St	Douglas St, 332' e/o	13,280
	Memorial Dr,	Ravinia Pl, 304' n/o	Cherry Ct, 443' s/o	142,240
Reconstruction - other	Spruce St	College Ave	Eighth St	29,680
	Hammond Ave	Ballard Rd to the east		65,000
	Subtotal			311,991
Reconstruction (on streets to be paved in 2019)	Alvin St	Evergreen Dr	cds	39,025
	Center St	North St	Atlantic St	92,325
	Evergreen Dr	Richmond St	Haymeadow Ave	25,000
	Hall St	Woodland Ave	Grant St	63,595
	Roosevelt St	Morrison St	Durkee St	84,325
	Summit St	Spencer St	College Ave	129,100
	Telulah Ave	Calumet St	John St	741,875
	Subtotal			1,175,245
Total				\$ 2,235,551

Description	2015 Actual	2016 Actual	2017 YTD Actual	2017 Adopted Budget	2017 Amended Budget	2018 Requested Budget	2018 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	6,251,240	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	11,615,353	11,534,806	11,534,806
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	79,409	79,409	89,960	89,960
Temp. Full-Time	1,017	0	0	0	0	0	0
Part-Time	14,303	11,422	10,540	14,148	14,148	14,614	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	543,679	619,098	442,319	657,062	658,318	701,192	701,192
Unemployment Compensation	505	136	0	0	0	0	0
Pension Expense / Revenue	8,425-	207,408	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	23,726	18,817	11,810	24,500	24,500	26,500	26,500
Awards & Recognition	309	595	149	545	545	545	545
Building Maintenance/Janitor.	6,540	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
Depreciation Expense	3,248,192	2,928,395	2,160,000	3,395,000	3,395,000	3,200,000	3,200,000
Uncollectible Accounts	3,140	2,165	819	5,500	5,500	4,500	4,500
Meter Expense	437,434	514,361	0	650,199	650,199	630,000	630,000
Interest Payments	549,687	541,150	419,310	554,013	554,013	522,325	522,325
Trans Out - General Fund	117,450	117,450	88,088	117,450	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	2,898,064	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	4,938	5,237	4,202	6,300	6,300	6,300	6,300
Clothing	5,848	5,330	2,867	5,905	5,905	5,500	5,500
Gas Purchases	8,186	8,359	2,691	10,150	10,150	8,400	8,400
Safety Supplies	8,493	6,990	7,929	5,500	5,500	5,500	5,500
Medical & Lab Supplies	20,578	20,239	14,498	20,000	20,000	21,000	21,000
Construction Materials	5,812	9,569	5,945	16,000	16,000	16,000	16,000
Vehicle & Equipment Parts	0	0	2,928	0	0	110,000	110,000
Miscellaneous Equipment	30,656	74,974	36,196	36,450	36,450	45,350	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	12,761	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	3,350	2,965	4,376	3,400	3,400	3,750	3,750
Contractor Fees	1,918,645	1,108,377	392,013	3,377,150	3,532,446	1,750,500	1,650,500
Temporary Help	276	0	434	0	0	0	0
Advertising	2,494	56	0	1,500	1,500	1,500	1,500
Tipping Fees	5,024	7,725	5,597	6,000	6,000	7,500	7,500
Lab Fees	1,114	1,139	6,676	2,000	2,000	25,050	25,050

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 & Maintenance	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

	2015 Actual	2016 Actual	2017 Budget	2017 Projected	2018 Budget
Revenues					
Charges for Services	\$ 9,617,422	\$ 9,358,103	\$ 9,658,000	\$ 9,500,000	\$ 9,275,000
Miscellaneous	1,545,955	2,236,580	1,569,300	2,269,300	1,826,000
Total Revenues	<u>11,163,377</u>	<u>11,594,683</u>	<u>11,227,300</u>	<u>11,769,300</u>	<u>11,101,000</u>
Expenses					
Operation and Maintenance	6,781,629	6,807,640	7,152,346	7,551,326	6,901,300
Depreciation	3,248,192	2,928,395	3,395,000	2,975,000	3,200,000
Total Expenses	<u>10,029,821</u>	<u>9,736,035</u>	<u>10,547,346</u>	<u>10,526,326</u>	<u>10,101,300</u>
Operating Income (Loss)	1,133,556	1,858,648	679,954	1,242,974	999,700
Non-Operating Revenues (Expenses)					
Interest Income	200,727	157,142	370,000	325,000	260,000
Interest Expense	(549,687)	(541,150)	(554,013)	(554,013)	(522,325)
Gain/Loss on Asset Disposal	(31,185)	(57,030)	-	-	-
Amortization of Premium on Debt Issue	19,438	18,773	18,053	18,053	17,256
Total Non-Operating	<u>(360,707)</u>	<u>(422,265)</u>	<u>(165,960)</u>	<u>(210,960)</u>	<u>(245,069)</u>
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	608,884	292,031	-	-	156,550
Trans Out - Capital Projects	-	(70,850)	-	-	-
Trans Out - Stormwater	(500,000)	-	-	-	-
Trans Out - General Fund	<u>(117,450)</u>	<u>(117,450)</u>	<u>(117,450)</u>	<u>(117,450)</u>	<u>(117,450)</u>
Change in Net Assets	764,283	1,540,114	396,544	914,564	793,731
Net Assets - Beginning	<u>93,634,716</u> *	<u>94,398,999</u>	<u>95,939,113</u>	<u>95,939,113</u>	<u>96,853,677</u>
Net Assets - Ending	<u>\$ 94,398,999</u>	<u>\$ 95,939,113</u>	<u>\$ 96,335,657</u>	<u>\$ 96,853,677</u>	<u>\$ 97,647,408</u>

* as restated

SCHEDULE OF CASH FLOWS

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

RESERVE REQUIREMENTS

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

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

	2017 Budget	2017 Projected	2018 Budget	2019 Projected	2020 Projected	2021 Projected	2022 Projected
Revenues							
Charges for Services	\$ 9,658,000	\$ 9,500,000	\$ 9,275,000	\$ 9,298,188	\$ 10,413,970	\$ 10,440,005	\$ 10,466,105
Miscellaneous	1,569,300	2,269,300	1,826,000	1,828,283	1,830,568	1,832,856	1,835,147
Total Revenues	<u>11,227,300</u>	<u>11,769,300</u>	<u>11,101,000</u>	<u>11,126,470</u>	<u>12,244,538</u>	<u>12,272,861</u>	<u>12,301,252</u>
Expenses							
Operating Expenses	7,152,346	7,551,326	6,901,300	7,108,339	7,321,589	7,541,237	7,767,474
Depreciation	3,395,000	2,975,000	3,200,000	3,375,000	3,625,000	3,760,000	3,895,000
Total Expenses	<u>10,547,346</u>	<u>10,526,326</u>	<u>10,101,300</u>	<u>10,483,339</u>	<u>10,946,589</u>	<u>11,301,237</u>	<u>11,662,474</u>
Operating Income	679,954	1,242,974	999,700	643,131	1,297,949	971,624	638,778
Non-Operating Revenues (Expenses)							
Interest Income	370,000	325,000	260,000	250,000	225,000	200,000	150,000
Interest Expense	(554,013)	(554,013)	(522,325)	(573,869)	(856,277)	(1,043,602)	(1,114,604)
Premium on Debt Issue	18,053	18,053	17,256	16,399	15,431	14,321	13,124
Debt Issue Costs	-	-	-	(100,000)	(85,000)	(75,000)	-
Total Non-Operating	<u>(165,960)</u>	<u>(210,960)</u>	<u>(245,069)</u>	<u>(407,470)</u>	<u>(700,846)</u>	<u>(904,281)</u>	<u>(951,479)</u>
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	<u>(117,450)</u>	<u>(117,450)</u>	<u>(117,450)</u>	<u>(117,450)</u>	<u>(117,450)</u>	<u>(117,450)</u>	<u>(117,450)</u>
Change in Net Assets	396,544	914,564	793,731	118,211	479,652	(50,107)	(430,151)
Total Net Assets - Beginning	<u>95,939,113</u>	<u>95,939,113</u>	<u>96,853,677</u>	<u>97,647,408</u>	<u>97,765,619</u>	<u>98,245,271</u>	<u>98,195,164</u>
Total Net Assets - Ending	<u>\$96,335,657</u>	<u>\$96,853,677</u>	<u>\$97,647,408</u>	<u>\$ 97,765,619</u>	<u>\$ 98,245,271</u>	<u>\$ 98,195,164</u>	<u>\$ 97,765,013</u>

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	<u>\$ 9,527,186</u>	<u>\$ 6,874,566</u>	<u>\$ 6,004,612</u>	<u>\$ 6,456,889</u>	<u>\$ 6,908,169</u>	<u>\$ 5,537,677</u>
25% Working Capital Reserve (prior year's audited 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

	2006 Revenue Bonds		2007 Revenue Bonds		2008 Refunding Bonds	
	Principal	Interest	Principal	Interest	Principal	Interest
2018	\$ 175,000	\$ 84,575	115,000	\$ 67,427	\$ 200,000	\$ 118,919
2019	175,000	76,700	120,000	62,250	215,000	110,519
2020	185,000	68,525	125,000	56,333	220,000	101,786
2021	195,000	59,250	135,000	49,750	230,000	92,336
2022	200,000	49,333	140,000	42,833	240,000	81,638
2023	215,000	38,833	145,000	35,667	255,000	70,013
2024	225,000	27,750	155,000	28,083	265,000	57,845
2025	235,000	16,167	160,000	20,167	275,000	45,213
2026	245,000	4,083	170,000	11,833	290,000	32,250
2027	-	-	180,000	3,000	305,000	18,750
2028	-	-	-	-	315,000	4,725
2029	-	-	-	-	-	-
2030	-	-	-	-	-	-
2031	-	-	-	-	-	-
	<u>\$ 1,850,000</u>	<u>\$ 425,216</u>	<u>\$ 1,445,000</u>	<u>\$ 377,343</u>	<u>\$ 2,810,000</u>	<u>\$ 733,994</u>

	2010 Revenue Bonds		2011 Revenue Bonds	
	Principal	Interest	Principal	Interest
2018	\$ 235,000	\$ 137,854	\$ 165,000	\$ 113,550
2019	245,000	130,800	165,000	108,600
2020	250,000	123,350	175,000	102,283
2021	260,000	114,783	180,000	95,150
2022	270,000	105,450	190,000	87,683
2023	280,000	95,300	195,000	79,950
2024	290,000	84,067	205,000	71,883
2025	300,000	72,200	210,000	63,550
2026	315,000	59,800	220,000	54,883
2027	325,000	46,933	230,000	45,817
2028	340,000	33,533	240,000	36,350
2029	355,000	19,533	250,000	26,483
2030	370,000	4,933	260,000	16,217
2031	-	-	300,000	4,250
	<u>\$ 3,835,000</u>	<u>\$ 1,028,536</u>	<u>\$ 2,985,000</u>	<u>\$ 906,649</u>

	TOTAL	
	Principal	Interest
2018	890,000	\$ 522,325
2019	920,000	488,869
2020	955,000	452,277
2021	1,000,000	411,269
2022	1,040,000	366,937
2023	1,090,000	319,763
2024	1,140,000	269,628
2025	1,180,000	217,297
2026	1,240,000	162,849
2027	1,040,000	114,500
2028	895,000	74,608
2029	605,000	46,016
2030	630,000	21,150
2031	300,000	4,250
	<u>\$ 12,925,000</u>	<u>\$ 3,471,738</u>

Total
1,412,325
1,408,869
1,407,277
1,411,269
1,406,937
1,409,763
1,409,628
1,397,297
1,402,849
1,154,500
969,608
651,016
651,150
304,250

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

CITY OF APPLETON 2018 BUDGET

STORMWATER UTILITY

Public Works Director: Paula A. Vandehey

Deputy Director/City Engineer: Ross M. Buetow

Deputy Director of Operations-DPW: Nathan D. Loper

CITY OF APPLETON 2018 BUDGET STORMWATER

MISSION STATEMENT

The Stormwater Utility was created to provide for the management of surface water run-off in the City of Appleton. It exists to limit flooding and protect water quality.

DISCUSSION OF SIGNIFICANT 2017 EVENTS

Updated the following City Stormwater Plans per new WDNR standards: Illicit Discharge Detection and Elimination

Completed final construction of Northland Pond in West Wisconsin drainage study area

Continued to improve practices for inspecting and maintaining City stormwater facilities by using available resources such as GIS mapping and the DPW horticulturist position

Hauled leaves and debris to the Outagamie County pilot compost site to reduce haul distances and associated costs

Continued implementing the selected alternatives of detailed drainage studies as streets come up for reconstruction, to reduce flooding and to take advantage of opportunities to implement water quality practices

Continued to implement the on-going Field Screening Program for the illicit discharge requirements of the City's NR216 Permit

Continued implementing the following programs as required by the City's NR216 permit: Public Education, Public Participation, Erosion Control, Pollution Prevention, Illicit Discharge Detection/Elimination, and Post-Construction Stormwater Management Plan review

Continue to inspect and maintain the stormwater facilities on Appleton Area School District (AASD) property (added in 2016) including ponds, bio-filters, and large sump manholes per the cooperative agreement with AASD.

Currently maintaining a total inventory of 40 wet ponds, 8 dry ponds, 4 bio-filters, and several miles of engineered channels

Continued working toward compliance with the new WDNR NR216 Water Quality Permit / Fox River TMDL

Continued to coordinate with WisDOT on 441/Oneida Street project to facilitate possible future expansion of the Valley Road detention basin to improve flood reduction and runoff quality

Completed construction of Arbutus Park storm sewer lift station rehabilitation

Continued design, permitting, and property acquisition for Leona Pond

Completed 60% engineering for Spartan Drive storm sewers, stormwater management practices, and stream crossings

Assisted Community Development with permitting issues, delineated wetlands and other stormwater planning issues

Received \$349,790 funding from the DNR Municipal Flood Control Grant for Northland Pond

Administered installation of native vegetation for Facilities & Construction Management at the new Erb Pool Pond

Constructed CTH JJ/Lightning Stormwater Pond jointly with Outagamie County for JJ/Lightning Drive reconstruction project

Constructed Cotter Street Pond to reduce flooding in Leonard Street Basin Study Area

Installed two new storm sewer outfalls to the Fox River per Spencer-Locust Basin Study

Completed drainage study for urbanization of Alvin Street and Evergreen Drive east of Richmond Street

CITY OF APPLETON 2018 BUDGET STORMWATER

MAJOR 2018 OBJECTIVES

Continue implementing the following programs as required by the City's NR216 permit: Public Education, Public Participation, Erosion Control, Pollution Prevention, Illicit Discharge Detection/Elimination, Post-Construction Stormwater Management Plans, including implementing the eighth year of on-going Field Screening Program for the Illicit Discharge requirements of the City's NR216 Permit

Continue to identify and pursue water quality practices toward continual progress in achieving compliance with TMDL water quality standards

Continue to improve practices for inspecting and maintaining City stormwater facilities by using available resources such as GIS mapping and the DPW horticulturist position

Continue to haul leaves and debris to the Outagamie County pilot compost site to reduce haul distances and associated costs

Continue to address flooding concerns by refining and implementing recommendations from completed drainage studies throughout the City

Continue working with WisDOT to find joint stormwater solutions on STH 441 Project

Continue to acquire land, complete bid documents, grant applications, and permit applications for Leona Street Pond Project

Construct Spartan Drive storm sewer and stream crossing between STH 47 and Haymeadow Avenue

Reconstruct Ballard Road storm sewer from Wisconsin Avenue to Fox River for flood reduction

Continue to update GIS measurements for all commercial properties for utility billing

Construct storm sewers and stormwater management facilities for reconstruction of Evergreen Drive east of STH 47 and Alvin Street jointly with Town of Grand Chute to meet future development needs.

DEPARTMENT BUDGET SUMMARY							
Programs		Actual		Budget			%
Unit	Title	2015	2016	Adopted 2017	Amended 2017	2018	Change *
Program Revenues		\$ 10,457,171	\$ 10,109,539	\$ 10,270,565	\$ 10,270,565	\$ 10,248,990	-0.21%
Program Expenses							
5210	Administration	5,193,082	5,459,129	5,555,798	5,565,313	5,790,432	4.22%
5220	Facility Maintenance	1,334,602	1,287,949	1,467,360	1,469,477	1,375,789	-6.24%
5225	Leaf Collection	427,209	436,899	424,575	426,057	445,172	4.85%
5230	Capital Construction	571,398	482,214	12,441,669	13,203,786	6,099,124	-50.98%
TOTAL		\$ 7,526,291	\$ 7,666,191	\$ 19,889,402	\$ 20,664,633	\$ 13,710,517	-31.07%
Expenses Comprised Of:							
	Personnel	1,382,857	1,586,771	1,697,932	1,703,697	1,767,897	4.12%
	Administrative Expense	4,508,102	4,507,679	4,717,472	4,717,472	5,002,224	6.04%
	Supplies & Materials	80,676	95,193	103,015	103,015	93,420	-9.31%
	Purchased Services	882,601	1,293,383	1,128,640	1,595,853	625,820	-44.55%
	Utilities	4,855	3,033	6,100	6,100	6,414	5.15%
	Repair & Maintenance	458,156	446,010	488,831	488,831	508,606	4.05%
	Capital Expenditures	209,044	(265,878)	11,747,412	12,049,665	5,706,136	-51.43%
Full Time Equivalent Staff:							
	Personnel allocated to programs	19.67	19.69	19.66	19.66	19.76	

* % change from prior year adopted budget

CITY OF APPLETON 2018 BUDGET

STORMWATER

Administration

Business Unit 5210

PROGRAM MISSION

To provide administrative and planning support to insure safe, reliable and environmentally sound stormwater management.

PROGRAM NARRATIVE

Link to City Goals:

Implements Key Strategies #1: "Prompt delivery of excellent services", #2: "Encourage active community participation and involvement", #3: "Recognize and grow everyone's talents", #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:

Continue to educate the community on stormwater issues and assessment billing policies
 Insure that all construction and repair of our facilities is in compliance with the Department of Natural Resources regulations
 Continue to research other funding sources for stormwater programs and submit requests when applicable
 Develop short and long range plans that meet regulations and provide for the stormwater needs of the community and the watershed
 Continue to train employees on stormwater regulations
 Show continual progress toward meeting TMDL water quality standards

Major changes in Revenue, Expenditures, or Programs:

Drainage studies have been completed for all major drainage areas in the City. Flood report analysis funds will be used to develop details and answer questions related to existing internal flood reports and to help refine and clarify existing study areas.

The increase in depreciation and interest expense is due to the expansion of infrastructure. As debt is issued each year to fund infrastructure costs interest expense continues to rise as the total debt issued is increasing each year; depreciation expense also increases as more infrastructure is added and the cost of the infrastructure is increasing each year.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Economic development					
Drainage Studies/Plans completed or updated	0	0	1	2**	0
Strategic Outcomes					
Alternative sources of revenue					
# of grants applied for	0	1	0	0	2***
Value of grant dollars awarded or applied for future reimbursement	\$ -	\$349,790*	\$ -	\$ -	\$ -
Safe, reliable future level of service					
Acre feet of storage identified for future use	0.0	0.75	0.0	0.0	0.0
# of DNR non-compliance notices received	0	0	0	0	0
Work Process Outputs					
Preventive maintenance of system					
Erosion control plans reviewed (permits)	49	49	25	25	30

* Northland Pond

** Evergreen/Alvin Study, Coop Pond Analysis

*** Leona Pond (NPS & MFC)

CITY OF APPLETON 2018 BUDGET

STORMWATER

Administration

Business Unit 5210

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 2017	2018
Revenues					
4411 Sundry Permits	\$ -	\$ 25	\$ -	\$ -	\$ -
4418 Plan Review Permit	37,079	41,034	30,000	30,000	35,000
4420 Erosion Control	6,750	6,450	7,000	7,000	7,000
4710 Interest on Investments	114,739	83,128	200,000	200,000	200,000
4730 Interest - Deferred Special	3,202	1,791	-	-	-
4880 Stormwater Revenue	9,123,964	9,339,293	9,361,845	9,361,845	9,415,000
5021 Capital Contributions	509,100	415,683	461,966	461,966	161,555
5035 Other Reimbursements	3,346	7,649	-	-	-
5071 Customer Penalty	35,053	34,329	37,000	37,000	35,000
5086 Premium on Debt Issue	123,563	176,209	172,754	172,754	395,435
5925 Transfer in - Wastewater	500,000	-	-	-	-
Total Revenue	\$ 10,456,796	\$ 10,105,591	\$ 10,270,565	\$ 10,270,565	\$ 10,248,990
Expenses					
6101 Regular Salaries	\$ 389,683	\$ 423,735	\$ 438,007	\$ 439,404	\$ 439,954
6104 Call Time	420	302	700	700	600
6105 Overtime	1,475	755	1,000	1,000	1,000
6108 Part-Time	918	424	484	484	-
6150 Fringes	119,028	224,232	150,201	150,408	162,365
6201 Training/Conferences	7,596	2,637	7,500	7,500	7,500
6206 Parking Permits	645	684	720	720	720
6301 Office Supplies	296	294	250	250	250
6303 Memberships & Licenses	16,654	13,100	15,010	15,010	15,015
6304 Postage/Freight	20,566	18,264	22,000	22,000	22,000
6305 Awards & Recognition	665	665	665	665	665
6309 Shop Supplies & Tools	132	138	-	-	-
6315 Books & Library Materials	-	-	100	100	100
6320 Printing & Reproduction	3,326	2,817	3,300	3,300	3,300
6321 Clothing	141	161	55	55	150
6323 Safety Supplies	109	352	100	100	350
6327 Miscellaneous Equipment	1,536	2,964	2,200	2,200	2,200
6401 Accounting/Audit	9,808	9,654	9,900	9,900	9,900
6402 Legal Fees	240	510	400	400	400
6403 Bank Services	16,720	16,653	18,120	18,120	18,120
6404 Consulting Services	139,453	175,494	231,800	239,711	178,800
6412 Advertising	3,361	-	-	-	-
6413 Utilities	885	849	1,104	1,104	1,104
6424 Software Support	9,746	12,930	15,005	15,005	5,975
6425 CEA Equip. Rental	8,035	7,604	10,600	10,600	10,600
6501 Insurance	33,534	39,936	47,000	47,000	42,730
6599 Other Contracts/Obligations	35,325	127,586	10,460	10,460	8,500
6601 Depreciation Expense	2,513,011	2,473,940	2,750,000	2,750,000	2,825,000
6623 Uncollectable Accounts	1,651	1,346	2,000	2,000	1,400
6720 Interest Payments	1,656,572	1,641,736	1,643,217	1,643,217	1,722,007
6730 Debt Issuance Costs	127,924	198,317	100,000	100,000	150,000
6751 Gain/Loss on refund Amort	41,127	48,550	61,400	61,400	147,227
7911 Trans Out - General Fund	12,500	12,500	12,500	12,500	12,500
7914 Transfer out - Capital Projects	20,000	-	-	-	-
Total Expense	\$ 5,193,082	\$ 5,459,129	\$ 5,555,798	\$ 5,565,313	\$ 5,790,432

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

Memberships & Licenses	\$ 250	Consulting Services	
IECA Membership	8,000	Stormwater management	
NR216 Annual Fee	3,300	plan reviews	\$ 50,000
NEWSC Dues	2,000	Flooding concerns	
MEG Membership	525	area study	50,000
ASCIS Membership	600	League of Municipalities	2,000
League of Municipalities SW	340	NR216 permitting	33,000
APWA Membership	<u>\$ 15,015</u>	Wetland studies	11,000
		Water quality modeling	32,800
Postage & Freight			<u>\$ 178,800</u>
City Service Invoice postage	\$ 20,700		
City Service Invoice folding/inserting	1,300		
	<u>\$ 22,000</u>		

CITY OF APPLETON 2018 BUDGET

STORMWATER

Facility Maintenance

Business Unit 5220

PROGRAM MISSION

To plan and implement a maintenance program that keeps the stormwater system in a safe and environmentally sound condition.

PROGRAM NARRATIVE

Link to City Goals:

Implements Key Strategies #1: "Prompt delivery of excellent services", #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:

- Continue to have a proactive maintenance program to identify major repair areas
- Reduce the number of failures and insure the system is operating properly
- Encourage good housekeeping practices on private developments, which will reduce the City's maintenance cost and improve water quality
- Reduce the response time per facility through an effective maintenance program
- Implement adaptive management plans for stormwater facilities to improve management techniques and response times for facilities maintenance

Major changes in Revenue, Expenditures, or Programs:

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.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Benefit of inspection program					
# of spot repairs identified from TV reports	5	21	20	20	18
Compliance with regulation					
# of protruding taps identified	5	15	15	15	13
# of cross connections identified	0	0	0	0	0
Strategic Outcomes					
Effectiveness of maintenance program					
# of trouble calls	19	28	20	20	15
% of total system televised	10%	10%	9%	9%	9%
Work Process Outputs					
Preventive maintenance					
Cubic yards of material collected from street sweeping operations	5,565	4,059	4,000	4,000	4,000
% of total storm sewer system cleaned	11.3%	11.1%	13.0%	13.0%	13.0%
Safeguarding health and safety					
# of protruding taps removed	23	0**	13	13	10
# of spot repairs made	37	0**	18	18	15

** Timing of contract pushes work into next calendar year (2017)

CITY OF APPLETON 2018 BUDGET

STORMWATER

Facility Maintenance

Business Unit 5220

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 2017	2018
Revenues					
4801 Charges for Serv.- Nontax	\$ 1,235	\$ 3,948	\$ -	\$ -	\$ -
Total Revenue	<u>\$ 375</u>	<u>\$ 3,948</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Expenses					
6101 Regular Salaries	\$ 420,494	\$ 414,241	\$ 450,613	\$ 452,456	\$ 457,911
6104 Call Time	2,260	1,567	1,600	1,600	1,600
6105 Overtime	10,925	15,974	9,300	9,300	9,800
6108 Part-Time	5,604	4,998	11,700	11,700	11,748
6150 Fringes	160,276	178,081	170,904	171,178	194,143
6201 Training/Conferences	150	-	-	-	-
6308 Landscape Supplies	2,997	10,845	3,860	3,860	6,360
6309 Shop Supplies & Tools	2,856	607	2,950	2,950	2,250
6316 Miscellaneous Supplies	147	-	-	-	-
6323 Safety Supplies	521	-	-	-	-
6325 Construction Materials	61,305	71,632	78,000	78,000	71,510
6327 Miscellaneous Equipment	6,774	5,259	12,450	12,450	7,200
6404 Consulting Services	229,351	236,013	262,960	262,960	181,500
6408 Contractor Fees	97,993	34,305	100,000	100,000	48,600
6413 Utilities	3,913	1,804	3,496	3,496	4,810
6415 Tipping Fees	50,307	31,176	50,000	50,000	50,000
6418 Equipment Repair & Maint	-	-	-	-	1,100
6420 Facilities Charges	2,339	-	2,406	2,406	2,406
6424 Software Support	-	64	500	500	-
6425 CEA Equip. Rental	229,288	222,750	249,411	249,411	267,641
6454 Grounds Repair & Maint.	782	2,923	2,000	2,000	2,000
6503 Rent	55,210	55,710	55,210	55,210	55,210
6899 Other Capital Outlay	(8,890)	-	-	-	-
Total Expense	<u>\$ 1,334,602</u>	<u>\$ 1,287,949</u>	<u>\$ 1,467,360</u>	<u>\$ 1,469,477</u>	<u>\$ 1,375,789</u>

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

Consulting Services

Ecology services for prairie & wetlands	\$ 85,000
Stormsewer TV & cleaning	77,500
Ecology services for ditches & ravines	19,000
	<u>\$ 181,500</u>

Contractor Fees

Surface restoration	\$ 26,600
Spot repairs	10,000
Animal control	4,000
Ditches & ravine repairs	1,000
Emergency Repairs	5,000
Non-native mowing	2,000
	<u>\$ 48,600</u>

Tipping Fees

Disposal costs of cleaning: \$35 per ton	
Streets - 1,020 tons	\$ 37,740
Storm sewers - 280 tons	10,360
Concrete	1,900
	<u>\$ 50,000</u>

Rent

Land for detention ponds:	
Appleton Memorial Park (@ \$2,800 / acre)	
AMP North, 7.28 acres	\$ 20,400
AMP South, 7 acres	19,600
Reid Golf Course Pond (per agreement)	
7.2 acres	15,210
	<u>\$ 55,210</u>

Construction Materials

Castings	\$ 28,000
Concrete	25,000
Gravel	5,000
Piping	4,000
Clear Stone	2,010
Other materials	7,500
	<u>\$ 71,510</u>

CITY OF APPLETON 2018 BUDGET

STORMWATER

Leaf Collection

Business Unit 5225

PROGRAM MISSION

Collect leaves from city streets and dispose of them in a safe and environmentally productive manner

PROGRAM NARRATIVE

Link to City Goals:

Implements Key Strategies #1: "Prompt delivery of excellent services", #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:

- Continually search for ways to improve communication with the public on leaf collection schedules
- Research and evaluate alternative methods of leaf collection and long term disposal
- Adjust leaf collection routes to avoid picking up leaves on the same day as collecting refuse
- Minimize secondary hauling costs of leaves, transporting to Outagamie County compost site, hauling to farm fields and grinding into mulch by working with a composting company

Major changes in Revenue, Expenditures, or Programs:

Actual leaf collections vary from year to year depending on the weather. It is projected to complete three cycles of collection in 2018. The cost per cubic yard collected is based more on the condition of leaves collected than the number of cycles (wet soggy vs. dry fluffy).

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Service provided					
Number of collection cycles	5	4	3	3	3
Strategic Outcomes					
Cost effective service provided					
Cost/cubic yard collected	\$ 11.00	\$ 11.36	\$ 11.75	\$ 11.75	\$ 12.00
Work Process Outputs					
Safer streets and cleaner storm water system					
Cubic yards of leaves collected	37,100	38,440	35,000	35,000	35,000

CITY OF APPLETON 2018 BUDGET

STORMWATER

Leaf Collection

Business Unit 5225

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 2017	2018
Expenses					
6101 Regular Salaries	\$ 145,131	\$ 154,821	\$ 170,564	\$ 171,854	\$ 172,294
6104 Call Time	86	81	100	100	100
6105 Overtime	12,078	14,222	7,500	7,500	10,000
6108 Part-Time	112	-	-	-	-
6150 Fringes	55,390	69,566	46,992	47,184	54,384
6408 Contractor Fees	6,962	100	-	-	-
6413 Utilities	57	380	1,500	1,500	500
6425 CEA Equip. Rental	207,393	197,729	197,919	197,919	207,894
Total Expense	<u>\$ 427,209</u>	<u>\$ 436,899</u>	<u>\$ 424,575</u>	<u>\$ 426,057</u>	<u>\$ 445,172</u>

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

None

CITY OF APPLETON 2018 BUDGET

STORMWATER

Capital Construction

Business Unit 5230

PROGRAM MISSION

Design, build, and replace stormwater facilities for the current users to insure compliance with established regulations, to protect surrounding infrastructure and the environment, to increase the acres of land available for development and to prevent major system failures.

PROGRAM NARRATIVE

Link to City Goals:

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:

- Continue to inform property owners of future construction in a timely manner
- Design projects to meet regulations and provide cost effective solutions for the community and the watershed
- Monitor projects to insure compliance with deadlines, specifications, and regulations
- Comply with the NR216 Stormwater permit requirements
- Continue implementing the Citywide stormwater management plan and regional flood studies selected alternatives

Major changes in Revenue, Expenditures, or Programs:

- Included funds for purchase of land for proposed Leona Street stormwater pond, to help meet flood reduction and water quality goals (construction planned for 2019).
- Included funds for reconstruction of Ballard Road storm sewer south of Wisconsin Avenue to help meet flood reduction goals.
- Included funds for new storm sewers and stormwater management facilities for urbanization of Alvin Street and Evergreen Drive east of STH 47.
- Included funds for storm sewers and box culvert construction in Spartan Drive from STH 47 to Haymeadow Avenue.
- Please see the Stormwater 5-year capital improvement plan on page 582 for further details.

PERFORMANCE INDICATORS

	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Target 2017</u>	<u>Projected 2017</u>	<u>Target 2018</u>
Client Benefits/Impacts					
Solutions to system discrepancies					
Residential mini-sewer/drainage complaints: *					
Solved	99	63	100	100	100
Outstanding	95	52	110	110	95
Strategic Outcomes					
Improvements to the stormwater system					
Total miles of storm sewer in City	285	286	288	288	289
% of total miles reconstructed	0.29%	0.49%	1.52%	1.52%	0.61%
Acres of new land available	0	0	0	0	0
Integrity and growth of the system					
ACRE-FT of storage developed	3.5	0.0	26.7	26.7	2**
Work Process Outputs					
Restoration of storm sewers					
Miles of storm sewer reconstructed	0.85	1.42	4.38	4.38	1.75
Expansion of storm sewer system					
Miles of new storm sewer added	0.34	0.58	1.08	1.08	1.54

* Order of resolution of residential drainage complaints is dependent on severity of problem and ability/timing preference of project coordinator to schedule.

** Evergreen/Alvin Drainage Study Area

CITY OF APPLETON 2018 BUDGET

STORMWATER

Capital Construction

Business Unit 5230

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2015	2016	Adopted 2017	Amended 2017	2018
Expenses					
6101 Regular Salaries	\$ 41,428	\$ 53,697	\$ 162,265	\$ 162,754	\$ 169,024
6105 Overtime	4,147	4,501	6,777	6,777	4,143
6108 Part-Time	1,554	924	2,073	2,073	2,854
6150 Fringes	11,849	24,651	67,152	67,225	75,977
6308 Landscape Supplies	663	-	-	-	-
6325 Construction Materials	170	417	-	-	-
6328 Signs	-	-	-	-	-
6404 Consulting Services	291,929	203,678	445,000	839,121	130,000
6408 Contractor Fees	180	-	-	65,181	-
6414 Advertising	-	92	-	-	-
6420 Facilities Charges	-	-	-	-	-
6425 CEA Equip. Rental	-	(3)	10,990	10,990	10,990
6454 Grounds Repair & Maintenance	-	2,013	-	-	-
6599 Other Contracts / Obligations	1,543	435,649	-	-	-
6801 Land	216,917	80,020	526,000	593,100	430,000
6809 Infrastructure Construction	3,799,953	2,441,123	11,221,412	11,456,565	5,276,136
6899 Other Capital Outlay	(3,798,935)	(2,764,548)	-	-	-
Total Expense	\$ 571,398	\$ 482,214	\$ 12,441,669	\$ 13,203,786	\$ 6,099,124

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

2018	To	From	To	Storm-water Utility
Labor Pool				251,998
CEA				10,990
Consulting Services	Construction Services			50,000
	Grant Applications			10,000
	Land Acquisition Services			10,000
	Modeling for Storm Sewer Const Projects			60,000
	Subtotal			130,000
Land Acquisition	Leona Street Pond (Part 2)			200,000
	Spartan Drive Ph 2 (BMP 6-7, Apple Creek Culvert)			80,000
	Alvin Street			100,000
	Wetlands In-Lieu Fees			50,000
	Subtotal			430,000
Miscellaneous Construction	Sump Pump Storm Sewer Program/Backyard Drainage Problems			200,000
	Surface restoration for mini sewer from previous year			85,000
	Surface restoration Linwood storm sewer Northland Pond			300,000
	Storm Laterals, Manholes, Inlets, Mini's Prior to 2018 Asphalt			262,096
	Storm Laterals, Manholes, Inlets, Mini's Prior to 2018 Concrete			37,030
	Flood Reduction Projects			50,000
	Native Landscaping			50,000
	NR151 Water Quality Practices - Reconst			50,000
	Spartan Ave Box Culvert 1 by Lift Station			175,000
	Subtotal			1,209,126
New construction	Alvin St	Evergreen Dr	cds	250,000
	Evergreen Dr	Richmond St (STH 47)	Haymeadow Ave	550,000
	Haymeadow Ave	Bluewater Way	Spartan Ave	71,250
	Spartan Ave	Haymeadow Ave	e/o	67,500
	Spartan Ave	Richmond St	Haymeadow Ave	225,000
	Subtotal			1,163,750
Reconstruction	Ballard Rd	Wisconsin Ave	Fox River	2,010,000
	Subtotal			2,010,000
Reconstruction - (on streets to be paved in 2019)	Center St	North St	Atlantic St	80,775
	Hall St	Woodland Ave	Grant St	66,360
	Roosevelt St	Morrison St	Durkee St	48,100
	Summit St	Spencer St	College Ave	147,625
	Telulah Ave	Calumet St	John St	550,400
	Subtotal			893,260
Total				\$ 6,099,124

83500	City of Appleton						1
TEACHERA	2018 Budget						09/27/17
BUD_STR_LN	Revenue and Expense Summary						16:31:59
Description	2015 Actual	2016 Actual	2017 YTD Actual	2017 Adopted Budget	2017 Amended Budget	2018 Requested Budget	2018 Adopted Budget
REVENUES							
Permits	43,829	47,509	27,570	37,000	37,000	42,025	42,000
Interest Income	117,941	84,919	223,858	200,000	200,000	200,000	200,000
Charges for Services	9,124,634	9,342,501	6,428,433	9,361,845	9,361,845	9,432,370	9,415,000
Intergov. Charges for Service	564	740	152	0	0	0	0
Other Revenues	1,171,063	633,870	322,577	671,720	671,720	372,795	591,990
TOTAL REVENUES	10,458,031	10,109,539	7,002,590	10,270,565	10,270,565	10,047,190	10,248,990
EXPENSES BY LINE ITEM							
Regular Salaries	110,319	113,130	86,297	139,596	144,615	143,186	143,186
Labor Pool Allocations	758,948	778,656	607,413	1,076,388	1,076,388	1,090,352	1,090,352
Call Time	2,765	1,950	1,492	2,400	2,400	2,300	2,300
Overtime	28,624	35,453	20,899	24,577	24,577	24,943	24,943
Temp. Full-Time	2,434	0	0	0	0	0	0
Part-Time	5,754	6,346	10,422	14,257	14,257	14,602	14,602
Other Compensation	23,149	2,900	2,540	3,775	3,775	3,955	3,955
Shift Differential	1,437	1,294	948	1,690	1,690	1,690	1,690
Sick Pay	6,138	47,952	3,921	0	0	0	0
Vacation Pay	96,746	102,561	67,692	0	0	0	0
Fringes	357,503	407,066	294,270	435,249	435,995	486,869	486,869
Pension Expense / Revenue	10,959-	89,464	0	0	0	0	0
Salaries & Fringe Benefits	1,382,858	1,586,772	1,095,894	1,697,932	1,703,697	1,767,897	1,767,897
Training & Conferences	7,746	2,637	3,000	7,500	7,500	7,500	7,500
Parking Permits	645	684	720	720	720	720	720
Office Supplies	296	294	106	250	250	250	250
Memberships & Licenses	16,654	13,100	13,875	15,010	15,010	15,015	15,015
Postage & Freight	20,566	18,264	11,409	22,000	22,000	22,000	22,000
Awards & Recognition	665	665	107	665	665	665	665
Insurance	33,534	39,936	35,254	47,000	47,000	45,830	42,730
Rent	55,210	55,710	55,210	55,210	55,210	55,210	55,210
Depreciation Expense	2,513,011	2,473,941	1,893,870	2,750,000	2,750,000	2,585,160	2,825,000
Uncollectible Accounts	1,651	1,346	830	2,000	2,000	1,400	1,400
Interest Payments	1,656,572	1,641,736	1,207,170	1,643,217	1,643,217	1,752,156	1,722,007
Debt Issuance Costs	127,924	198,317	0	100,000	100,000	100,000	150,000
Gain/Loss on Refund Amort.	41,127	48,550	102,087	61,400	61,400	61,400	147,227
Trans Out - General Fund	12,500	12,500	9,375	12,500	12,500	12,500	12,500
Trans Out - Capital Projects	20,000	0	0	0	0	0	0
Administrative Expense	4,508,101	4,507,680	3,333,013	4,717,472	4,717,472	4,659,806	5,002,224
Landscape Supplies	3,660	10,846	946	3,860	3,860	6,360	6,360
Shop Supplies & Tools	2,988	745	1,870	2,950	2,950	2,250	2,250
Books & Library Materials	0	0	0	100	100	100	100
Miscellaneous Supplies	147	0	90	0	0	0	0
Printing & Reproduction	3,326	2,817	2,131	3,300	3,300	3,300	3,300
Clothing	141	161	113	55	55	150	150
Safety Supplies	630	352	732	100	100	350	350
Construction Materials	61,475	72,049	36,608	78,000	78,000	76,010	71,510
Miscellaneous Equipment	8,310	8,223	7,877	14,650	14,650	9,400	9,400
Supplies & Materials	80,677	95,193	50,367	103,015	103,015	97,920	93,420
Accounting/Audit	9,808	9,654	0	9,900	9,900	9,900	9,900
Legal Fees	240	510	150	400	400	400	400
Bank Services	16,720	16,653	10,498	18,120	18,120	18,120	18,120
Consulting Services	660,734	637,658	363,106	939,760	1,341,792	596,760	490,300
Contractor Fees	107,924	34,405	62,699	100,000	165,181	104,600	48,600
Advertising	0	92	0	0	0	0	0
Tipping Fees	50,307	31,176	42,150	50,000	50,000	50,000	50,000
Other Contracts/Obligations	36,868	563,235	11,222	10,460	10,460	8,500	8,500
Purchased Services	882,601	1,293,383	489,825	1,128,640	1,595,853	788,280	625,820
Electric	288	274	151	306	306	310	310
Water	3,683	1,911	2,351	4,690	4,690	5,000	5,000
Telephone	644	609	574	840	840	840	840

Description	2015 Actual	2016 Actual	2017 YTD Actual	2017 Adopted Budget	2017 Amended Budget	2018 Requested Budget	2018 Adopted Budget
Cellular Telephone	240	240	180	264	264	264	264
Utilities	4,855	3,034	3,256	6,100	6,100	6,414	6,414
Equipment Repair & Maintenance	572	0	1,202	0	0	0	1,100
Facilities Charges	2,339	0	0	2,406	2,406	2,406	2,406
Software Support	9,746	12,994	10,481	15,505	15,505	15,975	5,975
CEA Equipment Rental	444,716	428,080	246,291	468,920	468,920	497,125	497,125
Grounds Repair & Maintenance	782	4,936	2,832	2,000	2,000	2,000	2,000
Repair & Maintenance	458,155	446,010	260,806	488,831	488,831	517,506	508,606
Land	216,917	80,020	0	526,000	593,100	330,000	430,000
Infrastructure Construction	3,799,953	2,441,123	5,917,674	11,221,412	11,456,565	5,376,136	5,276,136
Other Capital Outlay	3,807,826-	2,787,022-	0	0	0	0	0
Capital Expenditures	209,044	265,879-	5,917,674	11,747,412	12,049,665	5,706,136	5,706,136
TOTAL EXPENSES	7,526,291	7,666,193	11,150,835	19,889,402	20,664,633	13,543,959	13,710,517
	=====	=====	=====	=====	=====	=====	=====

CITY OF APPLETON 2018 BUDGET
STORMWATER 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	\$ 9,123,964	\$ 9,339,293	\$ 9,361,845	\$ 9,371,460	\$ 9,415,000
Miscellaneous	83,464	93,435	74,000	74,000	77,000
Total Revenues	<u>9,207,428</u>	<u>9,432,728</u>	<u>9,435,845</u>	<u>9,445,460</u>	<u>9,492,000</u>
Expenses					
Operating Expenses	3,155,156	3,291,148	2,880,616	3,273,730	3,254,659
Depreciation	2,513,011	2,473,940	2,750,000	2,670,000	2,825,000
Total Expenses	<u>5,668,167</u>	<u>5,765,088</u>	<u>5,630,616</u>	<u>5,943,730</u>	<u>6,079,659</u>
Operating Income (Loss)	3,539,261	3,667,640	3,805,229	3,501,730	3,412,341
Non-Operating Revenues (Expenses)					
Interest Income	117,941	84,919	200,000	200,000	200,000
Interest Expense	(1,656,573)	(1,641,736)	(1,643,217)	(1,640,310)	(1,722,007)
Gain/Loss on Refunding	(41,127)	(48,550)	(61,400)	(136,117)	(147,227)
Amortization of Premium on Debt Issue	123,563	176,209	172,754	405,852	395,435
Debt Expense	(127,924)	(198,317)	(100,000)	(100,000)	(150,000)
Other	-	-	-	-	-
Total Non-Operating	<u>(1,584,120)</u>	<u>(1,627,475)</u>	<u>(1,431,863)</u>	<u>(1,270,575)</u>	<u>(1,423,799)</u>
Income (Loss) Before Contributions and Transfers	1,955,141	2,040,165	2,373,366	2,231,155	1,988,542
Contributions and Transfers In (Out)					
Capital Contributions	509,100	415,683	461,966	600,056	161,555
Transfer In - Wastewater	500,000	-	-	-	-
Transfer Out - Capital Projects	-	-	-	-	-
Transfer Out - General Fund	<u>(32,500)</u>	<u>(12,500)</u>	<u>(12,500)</u>	<u>(12,500)</u>	<u>(12,500)</u>
Change in Net Assets	2,931,741	2,443,348	2,822,832	2,818,711	2,137,597
Total Net Assets - Beginning	<u>63,951,534</u> *	<u>66,883,275</u>	<u>69,326,623</u>	<u>69,326,623</u>	<u>72,145,334</u>
Total Net Assets - Ending	<u>\$ 66,883,275</u>	<u>\$ 69,326,623</u>	<u>\$ 72,149,455</u>	<u>\$ 72,145,334</u>	<u>\$ 74,282,931</u>

* as restated

SCHEDULE OF CASH FLOWS

Cash - Beginning of the Year	14,009,166	8,574,035
+ Change in Net Assets	2,818,711	2,137,597
+ Depreciation	2,670,000	2,825,000
+ Long Term Debt	5,000,000	4,200,000
- Contributed Capital	(600,056)	(161,555)
- Fixed Assets	(12,703,786)	(5,599,124)
- Principal Repayment	(2,620,000)	(3,235,000)
Working Cash - End of Year	<u>\$ 8,574,035</u>	<u>\$ 8,740,953</u>

The current annual rate of \$155.00 per ERU became effective July 1, 2013.

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

	2017 Budget	2017 Projected	2018 Budget	2019 Projected	2020 Projected	2021 Projected	2022 Projected
Revenues							
Charges for Services	\$ 9,361,845	\$ 9,371,460	\$ 9,415,000	\$ 10,827,250	\$ 10,881,386	\$ 10,935,793	\$ 10,990,472
Miscellaneous	74,000	74,000	77,000	70,000	70,000	70,000	70,000
Total Revenues	<u>9,435,845</u>	<u>9,445,460</u>	<u>9,492,000</u>	<u>10,897,250</u>	<u>10,951,386</u>	<u>11,005,793</u>	<u>11,060,472</u>
Expenses							
Operating Expenses	2,880,616	3,273,730	3,254,659	3,352,299	3,452,868	3,556,454	3,663,147
Depreciation	2,750,000	2,670,000	2,825,000	2,950,000	3,100,000	3,250,000	3,400,000
Total Expenses	<u>5,630,616</u>	<u>5,943,730</u>	<u>6,079,659</u>	<u>6,302,299</u>	<u>6,552,868</u>	<u>6,806,454</u>	<u>7,063,147</u>
Operating Income	3,805,229	3,501,730	3,412,341	4,594,951	4,398,519	4,199,339	3,997,325
Non-Operating Revenues (Expenses)							
Interest Income	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Interest Expense	(1,643,217)	(1,640,310)	(1,722,007)	(1,783,722)	(1,815,072)	(1,857,286)	(1,810,397)
Gain/Loss on Refunding	(61,400)	(136,117)	(147,227)	(140,016)	(142,690)	(127,533)	(112,756)
Premium on Debt Issue	172,754	405,852	395,435	377,373	348,901	313,161	278,126
Debt Issue Expense	(100,000)	(100,000)	(150,000)	(125,000)	(125,000)	(125,000)	(125,000)
Other	-	-	-	-	-	-	-
Total Non-Operating	<u>(1,431,863)</u>	<u>(1,270,575)</u>	<u>(1,423,799)</u>	<u>(1,823,742)</u>	<u>(1,533,861)</u>	<u>(1,596,658)</u>	<u>(1,570,027)</u>
Net Income Before Transfers	2,373,366	2,231,155	1,988,542	2,771,209	2,864,658	2,602,681	2,427,298
Contributions and Transfers In (Out)							
Capital Contributions	461,966	600,056	161,555	-	-	-	-
Capital Projects	-	-	-	-	-	-	-
General Fund	(32,500)	(12,500)	(12,500)	(12,500)	(12,500)	(12,500)	(12,500)
Change in Net Assets	2,802,832	2,818,711	2,137,597	2,758,709	2,852,158	2,590,181	2,414,798
Total Net Assets - Beginning	<u>69,326,623</u>	<u>69,326,623</u>	<u>72,145,334</u>	<u>74,282,931</u>	<u>77,041,640</u>	<u>79,893,797</u>	<u>82,483,979</u>
Total Net Assets - Ending	<u>\$ 72,129,455</u>	<u>\$ 72,145,334</u>	<u>\$ 74,282,931</u>	<u>\$ 77,041,640</u>	<u>\$ 79,893,797</u>	<u>\$ 82,483,979</u>	<u>\$ 84,898,777</u>

SCHEDULE OF CASH FLOWS

Cash - Beginning of the Year	14,009,166	8,574,035	8,740,953	9,781,459	10,910,007	11,631,398
+ Change in Net Assets	2,818,711	2,137,597	2,758,709	2,852,158	2,590,181	2,414,798
+ Depreciation	2,670,000	2,825,000	2,950,000	3,100,000	3,250,000	3,400,000
+ Long Term Debt	5,000,000	4,200,000	4,000,000	3,700,000	3,700,000	2,900,000
- Contributed Capital	(600,056)	(161,555)	-	-	-	-
- Fixed Assets	(12,703,786)	(5,599,124)	(5,353,203)	(4,913,609)	(4,908,791)	(3,884,196)
- Principal Repayment	(2,620,000)	(3,235,000)	(3,315,000)	(3,610,000)	(3,910,000)	(3,860,000)
Working Cash - End of Year	<u>\$ 8,574,035</u>	<u>\$ 8,740,953</u>	<u>\$ 9,781,459</u>	<u>\$ 10,910,007</u>	<u>\$ 11,631,398</u>	<u>\$ 12,602,000</u>
25% Working Capital Reserve (prior year's audited expenses)		1,231,635	1,247,292	1,287,130	1,320,110	1,356,560
Coverage Ratio	1.44	1.34	1.47	1.44	1.36	1.37

ASSUMPTIONS:

Borrow approximately 75% of capital expenditures as detailed for capital improvements in years 2018-2022
Interest rate at 4% for future debt issues
ERU's to increase at a rate of 1/2% per year after 2018
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:

Rate increased 24% effective July 1, 2013 to \$155 per ERU replacing the rate of \$125 per ERU that has been in effect since July 1, 2010. The rate increase that was planned for July 1, 2016 as part of the plan presented to Council on June 15, 2011 was not needed. The next rate increase is planned at 15% on January 1, 2019. Rates will be monitored on an annual basis for adjustment based on actual results or changes in circumstances.

CITY OF APPLETON 2018 BUDGET
STORMWATER UTILITY
LONG TERM DEBT

Year	2008		2009		2012		2013	
	Revenue Bonds		Revenue Bonds		Revenue Bonds		Revenue Bonds	
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
2018	\$ 275,000	\$ 2,750	\$ 355,000	\$ 17,950	\$ 1,050,000	\$ 289,540	\$ 265,000	\$ 224,881
2019	-	-	360,000	3,600	1,100,000	248,665	270,000	216,819
2020	-	-	-	-	1,145,000	203,315	280,000	208,494
2021	-	-	-	-	1,190,000	156,165	290,000	197,694
2022	-	-	-	-	880,000	117,865	300,000	185,794
2023	-	-	-	-	740,000	92,415	315,000	173,344
2024	-	-	-	-	495,000	75,728	325,000	160,444
2025	-	-	-	-	255,000	66,086	340,000	146,994
2026	-	-	-	-	260,000	58,065	355,000	132,944
2027	-	-	-	-	270,000	49,773	370,000	118,294
2028	-	-	-	-	280,000	41,170	385,000	101,961
2029	-	-	-	-	285,000	32,053	400,000	84,625
2030	-	-	-	-	295,000	22,547	420,000	66,469
2031	-	-	-	-	305,000	12,716	435,000	47,194
2032	-	-	-	-	315,000	2,559	460,000	26,775
2033	-	-	-	-	-	-	480,000	5,400
2034	-	-	-	-	-	-	-	-
2035	-	-	-	-	-	-	-	-
	<u>\$ 275,000</u>	<u>\$ 2,750</u>	<u>\$ 715,000</u>	<u>\$ 21,550</u>	<u>\$ 8,865,000</u>	<u>\$ 1,468,662</u>	<u>\$ 5,690,000</u>	<u>\$ 2,098,126</u>

Year	2014		2015		2015		2016	
	Revenue Bonds		Revenue Bonds		Refunding Bonds		Revenue Bonds	
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
2018	\$ 140,000	\$ 111,250	\$ 160,000	\$ 143,100	\$ 455,000	\$ 166,925	\$ 110,000	\$ 97,150
2019	145,000	108,375	165,000	139,825	470,000	157,600	110,000	94,950
2020	150,000	104,275	170,000	135,175	480,000	144,450	115,000	90,950
2021	155,000	99,663	175,000	129,963	495,000	129,713	120,000	86,200
2022	160,000	94,900	180,000	123,250	510,000	110,700	125,000	81,250
2023	160,000	90,100	185,000	115,900	545,000	89,250	130,000	76,100
2024	170,000	85,075	195,000	108,200	550,000	67,300	135,000	70,750
2025	175,000	78,550	200,000	100,250	580,000	44,400	140,000	65,200
2026	180,000	71,400	210,000	91,950	600,000	20,600	145,000	59,450
2027	190,000	63,900	220,000	83,250	365,000	3,650	150,000	53,500
2028	195,000	56,150	230,000	74,150	-	-	160,000	47,200
2029	205,000	48,050	235,000	64,800	-	-	165,000	40,650
2030	210,000	39,700	245,000	55,100	-	-	170,000	35,175
2031	220,000	31,000	255,000	45,000	-	-	175,000	29,963
2032	230,000	21,900	265,000	34,500	-	-	180,000	24,600
2033	240,000	12,400	280,000	23,450	-	-	185,000	19,088
2034	250,000	2,500	290,000	13,038	-	-	190,000	13,425
2035	-	-	300,000	2,625	-	-	195,000	7,613
2036	-	-	-	-	-	-	205,000	1,538
	<u>\$ 3,175,000</u>	<u>\$ 1,119,188</u>	<u>\$ 3,960,000</u>	<u>\$ 1,483,526</u>	<u>\$ 5,050,000</u>	<u>\$ 934,588</u>	<u>\$ 2,905,000</u>	<u>\$ 994,752</u>

Year	2016		2017		TOTAL	
	Refunding Bonds		Revenue Bonds		TOTAL	
	Principal	Interest	Principal	Interest	Principal	Interest
2018	\$ 425,000	\$ 452,425	\$ -	\$ 174,036	\$ 3,235,000	\$ 1,680,007
2019	695,000	439,875	-	166,013	3,315,000	1,575,722
2020	1,055,000	404,750	50,000	165,263	3,445,000	1,456,672
2021	965,000	365,250	185,000	162,238	3,575,000	1,326,886
2022	1,005,000	325,450	210,000	156,588	3,370,000	1,195,797
2023	1,050,000	283,900	215,000	150,175	3,340,000	1,071,184
2024	1,090,000	240,700	225,000	143,500	3,185,000	951,697
2025	1,130,000	195,900	230,000	136,638	3,050,000	834,018
2026	1,180,000	149,200	235,000	127,863	3,165,000	711,472
2027	1,230,000	100,500	245,000	118,163	3,040,000	591,030
2028	1,280,000	49,800	255,000	108,063	2,785,000	478,494
2029	925,000	9,250	270,000	97,413	2,485,000	376,841
2030	-	-	280,000	86,313	1,620,000	305,304
2031	-	-	290,000	74,813	1,680,000	240,686
2032	-	-	300,000	65,163	1,750,000	175,497
2033	-	-	310,000	55,938	1,495,000	116,276
2034	-	-	320,000	46,413	1,050,000	75,376
2035	-	-	330,000	36,278	825,000	46,516
2036	-	-	340,000	19,963	545,000	21,501
2037	-	-	350,000	11,619	350,000	11,619
2038	-	-	360,000	2,925	360,000	2,925
	<u>\$ 12,030,000</u>	<u>\$ 3,017,000</u>	<u>\$ 5,000,000</u>	<u>\$ 2,105,378</u>	<u>\$ 47,665,000</u>	<u>\$ 13,245,520</u>
						<u>\$ 60,910,520</u>

Note: Schedule is based on accrual method of accounting. Revenue bonds in amount of \$4,200,000 will be issued in 2018. Expected interest expense of the issue in 2018 is \$42,000 at 4%.

Appleton Wastewater Treatment Plant
Synopsis
July 2017 - September 2017

Wastewater Treatment Program

- The Appleton Wastewater Treatment Plant (AWWTP) final effluent met all Wisconsin Department of Natural Resources (WDNR) discharge monitoring reporting limits including carbonaceous biochemical oxygen demand (CBOD), total suspended solids (TSS), pH, phosphorous, and ammonia. (See Table 1). The plant maintained good treatment and a healthy microbiological population with a sludge retention time of seven and one half days. Dewatering processes functioned well and converted 14.7 Million Gallons (MG) of primary digested sludge to biosolids.

July 2017			
AWWTP Flows (MG)	Influent	Effluent	Percent
Industrial Flow	47.5		13.1%
Domestic Flow	314.9		86.9%
Total Flow	362.4		
Pollutant Loadings (lbs)	Influent	Effluent	Removal
CBOD	979,326	10,139	99.0%
TSS	1,594,591	7,160	99.6%
Phosphorous	18,370	490	97.3%
Ammonia	58,179	3,415	94.1%
August 2017			
Industrial Flow	54.8		17.2%
Domestic Flow	263.7		82.8%
Total Flow	318.5		
Pollutant Loadings (lbs)	Influent	Effluent	Removal
CBOD	825,173	11,364	98.6%
TSS	1,572,743	9,819	99.4%
Phosphorous	17,985	710	96.1%
Ammonia	64,270	3,119	95.1%
September 2017			
Industrial Flow	54.9		18.6%
Domestic Flow	240.8		81.4%
Total Flow	295.7		
Pollutant Loadings (lbs)	Influent	Effluent	Removal
CBOD	820,669	10,393	98.7%
TSS	1,392,740	8,524	99.4%
Phosphorous	17,549	761	95.7%
Ammonia	62,290	1,830	97.1%

Work in Progress:

- 2017 Appleton Wastewater Plant Improvements Project:** This project is comprised of four individual capital improvement projects which includes WAS Pumping System Replacement, High Pressure Blower #3 Replacement, Digester Biogas Mix Compressor Glycol Cooling System, and

Final Effluent Firm Pump Capacity Improvements. Donohue & Associates conducted a mid-course project meeting at the WWTP on July 26th to overview questions and findings with the preliminary Conditions Assessment and Project Alternatives. A draft technical memorandum (TM) was subsequently submitted for review. Based on meeting discussions and preliminary TM findings the Utility requested that Donohue stop work on the Final Effluent Firm Pump Capacity Improvements task. Estimated construction costs were more than double the original budget as a result of existing space constraints at the back of the plant including electrical distribution which would require upsizing to facilitate additional or larger pumps. Furthermore, questions arose regarding upstream hydraulic restrictions which necessitated a closer evaluation before the Utility could cost justify a construction project of this nature. A contract amendment with Donohue was advanced in September to account for this change including a contract to conduct an updated hydraulic analysis (*may also reference October 3, 2017 Utilities Informational Memorandum for additional details*).

- **Chemical Storage Room Rehab/Improvements Project:** McMahon conducted a 90% design meeting on August 28th to overview drawings and specifications with AWWTP staff. Public bidding documents are to be finalized and released in the next quarter.
- **Biogas Utilization Study Update: Donohue:** Donohue & Associates conducted a mid-course project meeting at the AWWTP on July 26th to overview preliminary findings associated with the updated biogas utilization study. A draft Digester Gas Utilization Report was submitted by Donohue on August 16th to the AWWTP for review and comment. A short list of next steps was identified based on the draft report and subsequent discussions with Donohue that included conducting updated biogas baseline testing and inspection of the existing Hurst biogas boilers by the original equipment manufacturer representative. This information will be utilized to determine if alternative operational set points or operational strategies under lower gas quality conditions are available for the existing boilers. It will also be used in part to appropriately evaluate the other alternatives listed within the Digester Gas Utilization Report. The final report is tentatively expected in late December or January 2018.
- **Spartan Drive Lift Station:** The AWWTP is supporting the Department of Public Works as part of the new Spartan Drive lift station construction project. Construction activities are ongoing. Applied Technologies, contracted engineer, completed a preliminary walk-through intended to identify punch-list items ahead of the WE Energies electrical service installation (anticipated to occur in late October). Equipment start-up activities will commence following electrical service installation with final completion not anticipated to occur until sometime late in the next quarter.

Regulatory Summary

- Monthly Discharge Monitoring reports for July, August and September were filed electronically on time for regulatory compliance. The 2017 3rd quarter short form was also submitted.

Laboratory Program

- Program objectives for regulatory and process sampling and analysis were met including results for the Discharge Monitoring Report (DMR) and Health Department pool testing program.
- Lab personnel completed the analysis of Single Blind Proficiency samples for laboratory recertification.

- Lab staff will be conducting compliance monitoring sampling and pretreatment monitoring sampling to comply with 2017 requirements. They also successfully assisted operations staff during the disinfection season which ended on September 30th.

EFFLUENT QUALITY SUMMARY
April - September 2016/2017

Table 1 – 2016 Monthly Permit Summary

Month	CBOD (mg/L)	TSS (mg/L)	TSS (lbs/day)	P (mg/L)	P (lbs/day)	NH3-N ⁽¹⁾ (mg/L)	Fecal Coliform Colonies/ (100 ml)	Chlorine ⁽²⁾ Residual (mg/L)	pH (s.u.)
<i>Permit Limit</i>	25	30	1,322 ⁽³⁾	1.0	23 ⁽³⁾	10, 11, 4.4, 18	400 col/100ml Geo.Mean	0.038 mg/L daily	6.0 - 9.0 daily limit
April ⁽³⁾	2	1	165	0.10	12.9	0.32	NA	NA	7.4/7.6
May	4	2	205	0.27	26.0	0.66	2	<0.01	7.0/7.4
June	3	2	211	0.28	31.8	0.75	10	<0.01	7.0/7.4
July	4	3	245	0.39	33.8	0.74	7	<0.01	7.0/7.2
August	4	3	196	0.42	31.7	1.92	3	<0.01	7.0/7.2
September	4	2	229	0.28	27.7	1.51	15	<0.01	6.8/6.9

Table 2 – 2017 Monthly Permit Summary

Month	CBOD (mg/L)	TSS (mg/L)	TSS (lbs/day)	P (mg/L)	P (lbs/day)	NH3-N ⁽¹⁾ (mg/L)	Fecal Coliform Colonies/ (100 ml)	Chlorine ⁽²⁾ Residual (mg/L)	pH (s.u.)
April ⁽³⁾	2	1	470	0.09	15.8	1.48	NA	NA	7.2/7.3
May	4	2	388	0.12	15.6	1.43	2	<0.01	6.9/8.1
June	3	2	257	0.13	15.5	1.25	10	<0.01	7.1/7.9
July	3	2	231	0.17	15.8	1.10	19	<0.01	7.1/7.4
August	4	4	317	0.26	22.9	1.14	9	<0.01	7.1/7.4
September	4	3	284	0.30	25.4	0.66	23	<0.01	7.1/7.3

NOTES:

- 1) Seasonal NH3-N limits: 10 mg/L Jan. 1 – Mar. 31, 11 mg/L Apr. 1 – May 31, 4.4 mg/L Sep 30 – Sep 30, 18 mg/L Oct 1 – Dec 31.
- 2) Seasonal fecal and residual chlorine limits are in effect May 1st through September 30th. * April 1, 2017 WPDES Reissuance with new TSS limits expressed as monthly concentration limit (mg/L) and loading limit (lbs).
- 3) April 1, 2017 WPDES Reissuance with new TSS limits expressed as monthly concentration limit (mg/L) and loading limit (lbs). The future TMDL phosphorus limit will be 23 lbs/day expressed as a 6-month average.

YEAR 2017 RECEIVING STATION REVENUE

Hauler	January	February	March	April	May	June	July	August	September	October	November	December	Y-T-D Total
A & B Leist Trucking	\$ 118,361.74	\$128,962.99	\$ 159,597.37	\$ 162,154.77	\$ 149,221.72	\$173,976.28	\$ 166,571.15	\$ 131,635.84	\$139,721.87				\$ 1,330,203.73
Hickory Meadows	\$ 27,521.03	\$ 19,802.84	\$ 26,208.74	\$ 24,713.06	\$ 34,503.32	\$ 50,488.94	\$ 27,292.89	\$ 30,661.10	\$ 35,120.72				\$ 276,312.64
Jeff Waldvogel Trkg.	\$ 24,968.84	\$ 33,040.15	\$ 34,780.25	\$ 36,016.73	\$ 41,377.45	\$ 46,962.54	\$ 48,136.60	\$ 49,779.37	\$ 45,571.70				\$ 360,633.63
Movin Materials	\$ -	\$ -	\$ -	\$ 6,331.87	\$ -	\$ -	\$ -	\$ -	\$ -				\$ 6,331.87
Waldvogel Trucking	\$ 1,883.47	\$ 2,670.05	\$ 3,031.98	\$ 2,670.27	\$ 2,286.58	\$ 2,081.96	\$ 2,133.64	\$ 2,248.62	\$ 2,067.80				\$ 21,074.37
2017 Total	\$ 172,735.08	\$184,476.03	\$ 223,618.34	\$ 231,886.70	\$ 227,389.07	\$ 273,509.72	\$ 244,134.28	\$ 214,324.93	\$222,482.09	\$ -	\$ -	\$ -	\$ 1,994,556.24
2016 Total	\$172,642.52	\$174,844.28	\$214,615.28	\$194,073.19	\$147,993.22	\$166,671.53	\$177,531.77	\$179,398.93	\$213,707.36	\$178,214.32	\$184,882.22	\$ 156,865.52	\$ 2,161,440.14

*Movin Materials new hauler in April 2017

Date: October 12, 2017
Copies: K. Rindt (via email)
C. Shaw (via email)
B. Kreski
Utilities Committee

Appleton Water Treatment Plant Operations Synopsis July, August, September 2017

Summary

The table below presents selected water production and quality performance metrics for the current and previous reporting periods. All compliance parameters met or exceeded regulatory requirements. During the quarter, average water production increased by about 7% and average lake turbidity doubled consistent with seasonal change. As expected, the average ratio of electrical energy consumption to production volume has plateaued following transition to conventional filtration and UV disinfection.

WATER PLANT PARAMETERS	Previous (Q2 2017)			Current (Q3 2017)		
	April	May	June	July	August	September
Water Treated						
Finished (million gallons)	251.0	281.2	290.9	303.9	310.4	282.6
Finished (million gallons / day)	8.4	9.1	9.7	9.8	10.0	9.4
Electrical Energy (WTF)						
Consumption (Megawatt-hours)	438.0	456.7	478.6	517.7	509.8	475.2
MWH / million gallons produced	1.74	1.62	1.64	1.70	1.64	1.68
Turbidity						
Lake (NTU)	7.7	9.2	18.9	17.1	31.1	27.5
Finished (NTU)	0.02	0.03	0.02	0.02	0.02	0.02
Finished (<0.15 NTU standard)	100%	100%	100%	100%	100%	100%
Water System Microbial Quality						
Total Coliform Samples	81	81	82	81	83	81
Compliance with Standard	100%	100%	100%	100%	100%	100%
Disinfectant Contact Time						
Minimum CT Ratio Provided	2.1	3.1	3.1	5.7	5.7	4.9
Hardness						
Lake Total / Calcium (mg/L)	193/104	193/107	186/96	178/93	163/80	166/79
Finished Total / Calcium (mg/L)	90/33	86/27	82/23	84/20	78/18	82/19
Finished Water Quality						
Total Chlorine (mg/L)	2.06	2.01	1.86	1.76	1.83	1.88
pH (SU) Min/Max	8.6/8.8	8.5/8.8	8.1/9.0	8.2/8.9	8.1/8.8	8.3/8.8
Water Temperature (Degrees F)	47.1	57.6	70.0	75.9	73.6	69.8
Fluoride (mg/L)	0.68	0.72	0.74	0.72	0.72	0.68
Orthophosphate (mg/L)	0.69	0.72	0.79	0.82	0.80	0.68

Laboratory

- In support of plant operations, staff conducted analyses according to method protocols for pH, turbidity, alkalinity, hardness, free/total chlorine, ammonia, phosphorus, and fluoride.
- In support of distribution operations, staff performed required 81 monthly Coliform bacteria analyses along with heterotrophic plate count (HPC) testing.
- Staff collected and processed raw and finished water samples to comply with LT2, DBPR2, HAB sampling requirements. Support was provided to consecutive customers with shipping of DBPR2 samples. Lead and copper monitoring was completed.

Safety

- WTF Safety programs were maintained by completing scheduled safety inspections. There were no significant incidents to report.
- Chemical unloading procedures are under review for potential improvements.

Operations

- Completed Lake Station electrical maintenance (IR scanning, MCC cleaning and inspection).
- North reservoir re-coating project 90% completed.
- #4 Softener cleaned for coating warranty inspection.
- Completed annual Waverly sanitary meter calibration check.
- Chemical systems design and rehabilitation project began.
- Database development continues for the implementation of the new plant data management and reporting system (Hach WIMS).
- Two UV Disinfection reactors were in continuous service during the quarter.

RUPIP

- Merrick Systems continued lime system warranty work to resolve level transmitter issues.

Staffing & Training

- All staff have completed mandatory department and City safety and employee training for the year.
- Operations Supervisor, Joe Myers, received the 2017 Operator's Meritorious Service Award from the Wisconsin Section of the American Water Works Association for consistent and outstanding service in providing a quality water supply to the public.

WATER SUMMARY FOR SEPTEMBER 2017

Work done by Construction Maintenance				
	<u>Sep 16</u>	<u>Sep 17</u>	<u>YTD 16</u>	<u>YTD 17</u>
Hydrants repaired	3	12	18	50
Hydrants replaced	1	0	4	4
Hydrant leaks	0	0	1	0
Valves replaced	0	2	1	4
Valves tested & inspected	37	32	1393	1888
Valves Rebuilt	0	4	14	27
Valve boxes repaired	3	5	46	46
Curb boxes repaired	11	34	129	152
Curb boxes replaced	1	0	21	2
Lead or galvanized replaced	0	0	18	30
New services 1"	0	0	0	0
New services >1"	0	0	1	0
Water main breaks	15	3	59	52
Joint leaks repaired	0	0	0	1
Water quality	0	0	2	7
Service leaks (City side)	0	0	1	3
Work done by Meter Service Team				
	<u>Sep 16</u>	<u>Sep 17</u>	<u>YTD 16</u>	<u>YTD 17</u>
New accounts set with 3/4" or 1"	27	4	140	51
New accounts set with larger meter	0	1	2	7
Meters tested	812	730	7248	4613
Meters failed	23	12	390	144
Meters stalled	0	1	0	1
Service calls	102	90	964	1061
Final readings	418	341	2990	2807
Read meters - no reading	0	0	5	0
New meters installed	881	761	7558	4814
Exception meters inspected	0	0	0	0
Exception meters removed	0	0	0	0
Service leaks found	0	5	25	22
Cross connection inspections	836	643	7036	4545

**WATER MAIN BREAK/Joint LEAK REPORT SEPTEMBER
2017**

LOCATION	Work Order	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	ESTIMATED DOLLAR VALUE OF WATER REVENUE LOSS**
3035 N. Roemer Road	230907	DIP	12"	1978	3" hole	4 hours	311,504	\$1,894.84
1419 S. Lee Street	230941	CIP	8"	1970	1/32"x19" split	2 days	275,687	\$1,676.97
1621 S. Hillcrest Drive	231267	CIP	6"	1657	1/32" crack	4 hours	22,792	\$138.64
								\$0.00
								\$0.00
								\$0.00
								\$0.00
								\$0.00

**Water loss is calculated at the residential rate of \$4.55 per 100 cubic feet.

**WATER MAIN BREAK/Joint LEAK DATA LOG SEPTEMBER
2017**

Leak Location	Arterial, Collector, Freeway, Local	Type of Street Concrete/Asphalt	Major Break Minor Break	Catch Basin Draining Yes/No	Date/Time	Comments
3035 N. Roemer Road	Local	Terrace	Major	Yes 100' away	9/7/2017 2:00 a.m. Thursday	Repaired right away to prevent water loss and property damage.
1419 S. Lee Street	Local	Concrete	Minor	Yes 190' away	9/7/2017 2:00 p.m. Thursday	Repaired the following day during normal work hours.
1621 S. Hillcrest Drive	Local	Terrace	Major	Yes 75' away	9/18/2017 9:00 p.m. Monday	Repaired right away to prevent water loss and property damage.