

CITY OF APPLETON 2019 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 2019 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 2018 EVENTS

WATER TREATMENT

Membrane Treatment Operation - The Koch Membrane System (KMS) was not operated during 2018. Equipment and parts have been decommissioned. While the equipment is reaching a 20 year life the water utility has entered into an agreement to list equipment for sale in a membrane consignment house.

Ultraviolet Light Process - The ultraviolet light process has performed well under the first full year of operation. Plant operating costs have continued to decline for equipment purchases and electrical and chemical consumption. Water quality goals were met with increased performance for virus destruction and parasite deactivation. Water turbidity remains at consistent levels similar to the previous ultrafiltration process.

1 Million Gallon Glendale Tower - The Glendale Water Tower has performed as designed for the first full year of operation. The tank was taken out of service for inspection and found to have coating failures in a number of locations. The tank was serviced under warranty and returned back into service.

Tank Maintenance - The three million gallon North Reservoir was taken out of service to complete coatings work. The tank was media blasted and a coating system was applied to prevent corrosion.

Plant Process Control - The dual media filters were further optimized by water plant staff. Filter performance was improved by adjusting hydraulic loading rates and filter to waste controls. Turbidity continues to be effectively removed with the application of Aluminum Chlorohydrate (ACH).

High Service Pumps - The #3 and #6 High Service Pumps were equipped with variable frequency drives. Prior to the installation, the pumps were fixed speed and unfortunately could not meet the dynamic hydraulic requirements out in the distribution system. The two pumps are now fully functional.

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

Lake Station Project - Preliminary engineering for the lake intake project consisted of a conditions assessment of the intake, chemical feed systems, and the lake intake building. This phase of engineering will define the engineering project in 2019 with bidding documents.

WATER DISTRIBUTION

Celebrated National Public Works Week with a department-wide breakfast for Public Works employees
Continued to sell our used water meters and other components to a local scrap company
Installed a bulk water distribution station at the Glendale Yard Site
Implemented the Aqual-Hawk customer portal

WATER ADMINISTRATION

Reviewed rate requirements. The utility had a 6.17% rate of return for 2017. 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 2019 BUDGET WATER UTILITY

MAJOR 2019 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 Raw Water Lake Station Project will be in an engineering phase that produces bidding documents. Ultimately the project will make necessary upgrades and meet redundancy objectives for the intake and 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 intake and pipe. Other project components include a second lake intake to deter frazil ice formation, new chemical delivery system, and screening equipment at the shore well.

Chemical Delivery Systems will be repaired or replaced depending on current state of conditions. Systems for 2019 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, completed in 2018, into appropriate operating and capital budget requests

Promote 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

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 2018 audit, to further determine when the next rate increase application will be filed with the Public Service Commission.

DEPARTMENT BUDGET SUMMARY							
Programs		Actual		Budget			%
Unit	Title	2016	2017	Adopted 2018	Amended 2018	2019	Change *
Program Revenues		\$ 22,030,410	\$ 22,569,045	\$ 22,411,582	\$ 22,411,582	21,875,199	-2.39%
Program Expenses							
5310	Administration	10,299,411	9,346,999	9,953,169	9,953,169	9,488,621	-4.67%
5321	Treatment Admin	373,221	392,241	396,282	396,282	399,699	0.86%
5323	Treatment Operations	5,747,083	5,305,073	5,718,576	5,808,591	6,451,024	12.81%
5351	Distribution Admin	515,492	467,193	610,310	610,310	521,432	-14.56%
5352	Meter Operations	94,203	103,533	261,766	285,466	262,488	0.28%
5353	Distribution Operations	1,053,581	1,319,809	1,479,198	1,638,833	1,530,986	3.50%
5325	Treatment Capital	45,122	38,185	700,000	1,530,610	1,565,000	123.57%
5370	Distribution Capital	42,704	134,912	3,503,847	3,638,998	3,800,406	8.46%
TOTAL		\$ 18,170,817	\$ 17,107,945	\$ 22,623,148	\$ 23,862,259	24,019,656	6.17%
Expenses Comprised Of:							
	Personnel	2,776,825	2,902,027	3,160,978	3,160,978	3,199,464	1.22%
	Administrative Expense	9,893,624	8,913,542	9,649,677	9,649,677	9,176,825	-4.90%
	Supplies & Materials	1,648,939	1,450,286	1,823,025	1,832,660	1,787,800	-1.93%
	Purchased Services	421,572	947,065	1,068,365	2,133,290	2,643,045	147.39%
	Utilities	2,695,356	2,401,227	2,825,846	2,825,846	2,706,245	-4.23%
	Repair & Maintenance	944,353	580,587	816,157	816,157	895,877	9.77%
	Capital Expenditures	(209,852)	(86,789)	3,279,100	3,443,651	3,610,400	10.10%
Full Time Equivalent Staff:							
	Personnel allocated to programs	38.24	38.28	36.84	36.84	36.84	

* % change from prior year adopted budget
Water.xls

**CITY OF APPLETON 2019 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 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Timely and accurate posting of overhead expenses					
% of months posted within 10 days of end of month	75%	83%	83%	83%	83%
Strategic Outcomes					
Maintain compliance with GAAP & PSC					
# of audit compliance issues not raised by staff	0	0	0	0	0
Work Process Outputs					
# of bills processed	113,992	114,562	115,000	115,000	115,100
PSC Annual Report filed	On time	On time	On time	On time	On time

**CITY OF APPLETON 2019 BUDGET
WATER UTILITY**

Finance Administration

Business Unit 5310

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Revenues					
4411 Sundry Permits	\$ 210	\$ 180	\$ 200	\$ 200	\$ 200
4710 Interest on Investments	132,716	177,734	250,000	250,000	125,000
4820 Unmetered Water Sales	21,796	30,108	22,000	22,000	22,000
4821 Water Service - Residential	8,414,600	8,190,234	8,375,000	8,375,000	8,200,000
4822 Water Service - Commercial	2,316,117	2,184,703	2,285,000	2,285,000	2,250,000
4823 Water Service - Industrial	1,243,460	1,449,392	1,250,000	1,250,000	1,250,000
4824 Water Service - Municipal	376,420	368,847	370,000	370,000	370,000
4825 Private Fire Protection	259,398	264,633	265,000	265,000	268,000
4826 Public Fire Protection	1,784,428	1,780,959	1,792,000	1,792,000	1,782,000
4827 Fire Protection Wholesale	198,187	196,584	196,500	196,500	196,500
4828 Water Service - Multi-family	666,485	681,273	700,000	700,000	700,000
4829 Sales for Resale	5,337,036	5,163,151	5,250,000	5,250,000	5,250,000
5005 Sale of City Prop - Tax	19,348	21,064	-	-	-
5006 Gain (Loss) on Asset Disposal	-	(39,965)	-	-	-
5016 Lease Revenue	266,115	306,081	280,000	280,000	300,000
5021 Capital Contributions	355,807	736,903	312,750	312,750	229,300
5030 Damage to City Property	11,056	65,681	4,000	4,000	4,000
5035 Other Reimbursements	9,098	10,094	2,500	2,500	2,500
5070 WTR Other Sales Flushing	9,349	12,097	10,000	10,000	10,000
5071 Customer Penalty	85,737	83,907	86,000	86,000	85,000
5072 WTR Misc Revenue (turn-on)	4,475	4,225	3,000	3,000	4,000
5073 Other WTR Rev-Sewer Billing	179,968	201,631	222,000	222,000	183,000
5077 Income from Admin Fee	4,753	4,757	5,000	5,000	5,000
5079 Private Hydrant Testing	13,765	13,140	14,500	14,500	13,000
5083 Emergency Water Turn Off	643	635	-	-	500
5086 Premium on Debt Issuance	319,443	660,997	716,132	716,132	625,199
Total Revenue	\$ 22,030,410	\$ 22,569,045	\$ 22,411,582	\$ 22,411,582	21,875,199
Expenses					
6101 Regular Salary	\$ 109,578	\$ 111,735	\$ 118,080	\$ 118,080	\$ 120,202
6105 Overtime	298	169	-	-	-
6150 Fringes	170,526	195,930	49,527	49,527	50,294
6304 Postage\Freight	18,249	20,053	24,000	24,000	23,000
6320 Printing and Reproduction	2,392	3,387	3,300	3,300	3,500
6401 Accounting/Audit	11,140	11,195	9,360	9,360	11,500
6402 Legal Fees	22,467	19,774	23,000	23,000	24,000
6403 Bank Services	22,034	19,666	23,000	23,000	22,000
6404 Consulting Services	-	277	-	-	-
6413 Utilities	97,862	95,740	108,000	108,000	108,000
6429 Interfund Allocations	(480)	(1,135)	-	-	-
6501 Insurance - Property	111,462	132,444	127,710	127,710	119,350
6601 Depreciation Expense	4,517,926	4,532,727	5,065,000	5,065,000	4,900,000
6623 Uncollectible Accounts	3,935	3,696	8,000	8,000	5,000
6721 Bond Interest Payments	2,861,629	2,095,814	2,021,665	2,021,665	1,822,765
6730 Debt Issuance Cost	286,749	20,500	85,000	85,000	85,000
6751 Gain/Loss on refund Amort.	209,558	229,730	273,727	273,727	245,210
7911 Trans Out - Gen Fund	1,854,086	1,855,297	2,013,800	2,013,800	1,948,800
Total Expense	\$ 10,299,411	\$ 9,346,999	\$ 9,953,169	\$ 9,953,169	9,488,621

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

Postage\Freight		Trans Out-Gen Fund	
City Service Invoice postage	\$ 21,500	Payment in lieu of tax	\$ 1,935,000
City Service Invoice folding/inserting	1,500	Administration fee	13,800
	<u>\$ 23,000</u>		<u>\$ 1,948,800</u>
Legal Fees			
PSC Assessment	\$ 24,000		
	<u>\$ 24,000</u>		

**CITY OF APPLETON 2019 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:

No major changes.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Safe work environment					
# of workers comp claims/year	0	0	0	0	0
# of first aid entries per year	0	2	0	0	0
Strategic Outcomes					
Effective use of budgeted funds					
% of operational budget obligated	85%	82%	100%	100%	100%
Trained Staff					
% of staff adequately trained	100%	100%	100%	100%	100%
Average # of hours training per employee	10	8	25	25	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	2	2	2	2	2

*Superfund Amendments and Reauthorization Act

**CITY OF APPLETON 2019 BUDGET
WATER UTILITY**

Treatment Administration

Business Unit 5321

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Expenses					
6101 Regular Salary	\$ 253,301	\$ 264,400	\$ 260,456	\$ 260,456	\$ 268,907
6104 Call Time	14	-	-	-	-
6105 Overtime	329	290	2,362	2,362	2,422
6108 Part-Time	1,696	1,771	2,798	2,798	2,810
6150 Fringes	75,610	84,593	78,409	78,409	76,643
6201 Training\Conferences	4,459	2,106	11,000	11,000	7,000
6301 Office Supplies	1,104	786	2,500	2,500	2,500
6303 Memberships & Licenses	7,841	8,223	8,000	8,000	8,000
6304 Postage/Freight	1,583	618	1,200	1,200	1,200
6305 Awards & Recognition	181	161	210	210	210
6307 Food & Provisions	316	227	280	280	280
6320 Printing & Reproduction	11,319	10,513	10,600	10,600	10,600
6321 Clothing	27	-	-	-	-
6327 Miscellaneous Equipment	696	1,759	200	200	1,000
6408 Contractor Fees	2,492	3,504	3,000	3,000	3,000
6412 Advertising	-	-	1,000	1,000	1,000
6413 Utilities	11,475	12,426	12,550	12,550	13,100
6425 CEA Equip. Rental	778	864	1,717	1,717	1,027
Total Expense	<u>\$ 373,221</u>	<u>\$ 392,241</u>	<u>\$ 396,282</u>	<u>\$ 396,282</u>	<u>399,699</u>

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

None

**CITY OF APPLETON 2019 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 .2 FTE of the allocation of a shared 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.

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

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

A chemical optimization study is being presented to identify water chemistry efficiencies for the following chemicals: Powder Activated Carbon and Potassium Permanganate. These chemicals are used in the pre-treatment of water and have significant treatment costs. Pursuing an optimization study will identify the source water chemistry and what, if any equipment (e.g., analyzers) are needed to reduce treatment costs.

Contractor fees includes costs to paint the Lindbergh standpipe.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</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	3,275 MG	3,282 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	6	6	6
Water towers					
# inspected / painted per year	1 / 1	1 / 0	1 / 0	1 / 0	1 / 1

**CITY OF APPLETON 2019 BUDGET
WATER UTILITY**

Treatment Operations

Business Unit 5323

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Expenses					
6101 Regular Salary	\$ 636,604	\$ 651,477	\$ 659,675	\$ 659,675	\$ 670,860
6104 Call Time	559	946	2,859	2,859	2,200
6105 Overtime	91,864	51,911	85,414	85,414	79,355
6108 Part-Time	7,289	457	-	-	-
6150 Fringes	248,066	271,240	266,732	266,732	286,741
6306 Building Maint./Janitorial	1,967	2,083	2,100	2,100	2,150
6309 Shop Supplies & Tools	9,820	11,257	11,500	11,500	13,500
6310 Chemicals	1,322,812	1,115,536	1,369,000	1,369,000	1,343,000
6316 Miscellaneous Supplies	360	-	-	-	-
6318 Materials	11,977	1,603	-	-	-
6321 Clothing	2,181	2,266	2,500	2,500	2,400
6322 Gas Purchases	12,367	10,511	10,000	10,000	10,000
6323 Safety Supplies	1,865	7,072	6,200	6,200	6,200
6324 Medical/Lab Supplies	62,849	41,688	38,850	38,850	38,850
6326 Equipment Parts	828	4,547	42,000	42,000	56,000
6327 Miscellaneous Equipment	18,340	8,387	46,500	46,500	23,000
6404 Consulting Services	32,366	46,081	10,000	31,940	132,000
6407 Collection Services	1,933	1,908	2,850	2,850	2,350
6408 Contractor Fees	94,829	575,297	46,990	115,065	754,440
6413 Utilities	2,530,531	2,237,165	2,646,025	2,646,025	2,524,585
6416 Building Repairs & Maint	412,349	105	70,000	70,000	125,000
6418 Equip Repairs & Maint	38,114	22,743	55,000	55,000	30,000
6420 Facilities Charges	243,857	211,504	268,413	268,413	274,692
6424 Software Support	11,015	18,567	12,900	12,900	16,100
6425 CEA Equip. Rental	13,152	11,973	15,273	15,273	17,716
6432 Lab Fees	16,849	11,944	20,300	20,300	15,890
6440 Snow Removal Services	5,520	1,580	5,000	5,000	5,000
6454 Grounds Repair & Maint	6,286	8,793	7,500	7,500	4,000
6599 Other Contracts/Obligations	12,309	12,432	14,995	14,995	14,995
6899 Other Capital Outlay	(101,775)	(36,000)	-	-	-
Total Expense	\$ 5,747,083	\$ 5,305,073	\$ 5,718,576	\$ 5,808,591	6,451,024

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

Chemicals		Miscellaneous Equipment	
Ammonia	\$ 20,000	SCADA equipment	\$ 16,000
Carbon dioxide	60,000	Lead service testing equipment	7,000
Chlorine	75,000		<u>\$ 23,000</u>
Ferric sulfate	135,000		
Fluoride	20,000	Contractor Fees	
Lime	475,000	Lab equipment maintenance	\$ 7,100
Poly phosphate	60,000	Annual safety inspections	4,540
Permanganate	350,000	Intake inspection	5,200
Powder carbon	50,000	Lindbergh tower painting	725,000
Softener Polymer	30,000	Tower cleaning & inspection	9,000
ACH	60,000	Tower cathodic protection	3,600
Softener Salt	3,000		<u>\$ 754,440</u>
Other chemicals	5,000		
<u>\$ 1,343,000</u>		Medical/Lab Supplies	
Equipment Parts		Lab supplies	\$ 20,000
Valves & actuators	\$ 15,000	Nitrogen	1,850
Pumps & motors	10,000	Bac T testing supplies	13,000
Piping, hoses & tubing	10,000	Media & filters	4,000
Filters & lubricants	5,000		<u>\$ 38,850</u>
UV light replacements	16,000		
<u>\$ 56,000</u>		Equipment Repair & Maintenance	
Building Repair & Maintenance		Pumps & motor repairs	\$ 30,000
Expansion joint repair	\$ 125,000		<u>\$ 30,000</u>
<u>\$ 125,000</u>		Lab Fees	
Consulting Services		DBPR-2 testing	\$ 4,928
Optimal feed study	\$ 75,000	Water quality parameters	1,760
Regulatory corrosion control study	57,000	Synthetic organic compound testing	2,475
<u>\$ 132,000</u>		Other required testing	6,727
			<u>\$ 15,890</u>

**CITY OF APPLETON 2019 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 2019 CIPs:

	<u>2019 Budget</u>	<u>Page</u>
Second Raw Water Line	1,400,000	Projects, Pg. 606
HVAC upgrades	100,000	Projects, Pg. 614
North reservoir and tower road replacement	65,000	Projects, Pg. 613
	<u>\$ 1,565,000</u>	

Major changes in Revenue, Expenditures or Programs:

No major changes.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Water Rate changes % per year	0%	0%	0%	0%	0%
Strategic Outcomes					
Tri-annual Sanitary Review # of corrective actions	0	0	0	0	0
# of recommended changes	1	1	1	1	1
Work Process Outputs					
Project Management % of projects completed at year-end	83%	22%	100%	75%	100%

**CITY OF APPLETON 2019 BUDGET
WATER UTILITY**

Treatment Capital Improvements

Business Unit 5325

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Expenses					
6404 Consulting Services	\$ 51,297	\$ 41,280	\$ 125,000	\$ 224,720	\$ 1,400,000
6408 Contractor Fees	49,944	16,220	500,000	1,200,890	-
6802 Land Improvements	-	101,637	-	-	65,000
6803 Buildings	125,101	-	-	-	100,000
6804 Equipment	1,503,018	5,775	75,000	105,000	-
6899 Other Capital Outlay	(1,684,238)	(126,727)	-	-	-
Total Expense	\$ 45,122	\$ 38,185	\$ 700,000	\$ 1,530,610	1,565,000

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

<u>Consulting Services</u>		<u>Buildings</u>	
Second raw water line	\$ 1,400,000	HVAC upgrades	\$ 100,000
	<u>\$ 1,400,000</u>		<u>\$ 100,000</u>
<u>Land Improvements</u>			
Tower road replacement	\$ 65,000		
	<u>\$ 65,000</u>		

**CITY OF APPLETON 2019 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 expected number of street excavation permits with Outagamie County.
- In 2019 the increase in part-time labor is for seasonal staff to update the water records in the GIS system accounts.
- Increase in printing and reproduction and postage/freight is to promote the use of the new customer portal, AquaHawk.
- Increase in software support is due to GPS units that have been installed in all water distribution vehicles.
- Cross connections surveys are completed at the time of meter replacement. The decrease in the number of surveys completed reflects the completion of the radio read meter project in 2017.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Efficient customer service					
# Cross connection surveys	8,977	5,865	1,500	250	150
# AquaHawk customers enrolled (total)	0	0	250	250	1,250
Strategic Outcomes					
Consistent & current information					
Policies reviewed/updated	0	1	1	1	1
Turnover ratio of inventory	0.72	0.83	0.90	0.90	0.90
Work Process Outputs					
Reporting & record keeping					
# of reports generated for PSC	1	1	1	1	1

**CITY OF APPLETON 2019 BUDGET
WATER UTILITY**

Distribution Administration

Business Unit 5351

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Expenses					
6101 Regular Salaries	\$ 265,433	\$ 249,556	\$ 267,253	\$ 267,253	\$ 276,740
6104 Call Time	1,650	890	1,200	1,200	1,500
6105 Overtime	916	969	1,500	1,500	1,500
6108 Part-Time	1,562	254	-	-	6,740
6150 Fringes	125,173	96,923	92,325	92,325	98,355
6201 Training\Conferences	726	1,630	2,500	2,500	2,500
6301 Office Supplies	869	562	1,000	1,000	1,000
6303 Memberships & Licenses	603	709	870	870	845
6304 Postage\Freight	31	23	250	250	1,250
6305 Awards & Recognition	611	658	665	665	665
6306 Building Maint./Janitorial	2,500	2,856	2,450	2,450	2,450
6309 Shop Supplies & Tools	48	38	50	50	50
6320 Printing & Reproduction	1,392	1,828	2,000	2,000	4,500
6321 Clothing	776	726	1,600	1,600	1,600
6323 Safety Supplies	712	699	900	900	900
6324 Medical\Lab Supplies	96	97	100	100	100
6326 Vehicle & Equipment Parts	-	300	-	-	-
6327 Miscellaneous Equipment	5,936	3,311	4,250	4,250	4,250
6404 Consulting Services	-	-	125,000	125,000	-
6413 Utilities	54,998	54,969	57,471	57,471	59,460
6420 Facilities Charges	21,889	22,588	22,176	22,176	24,162
6424 Software Support	3,426	2,841	3,340	3,340	4,295
6425 CEA Equip. Rental	11,093	8,860	5,540	5,540	9,700
6430 Health Services	-	20	50	50	50
6599 Other Contracts/Obligations	15,052	15,886	17,820	17,820	18,820
Total Expense	<u>\$ 515,492</u>	<u>\$ 467,193</u>	<u>\$ 610,310</u>	<u>\$ 610,310</u>	<u>521,432</u>

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

Other Contracts/Obligations

Excavation permits (City)	\$ 7,000
Digger's Hotline fees	7,500
Excavation permits (County)	4,320
	<u>\$ 18,820</u>

**CITY OF APPLETON 2019 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 software support includes the hosting fee of the data associated with the new meter reading system adjusted for the number of active meters. Also included is the hosting fees of the new customer service portal (Aqualhawk) which was implemented in 2018.

With the second year completion of the new meter installation program, the need to purchase meters and related cost moved back to the meter operations/maintenance business unit, the miscellaneous equipment accounts for the purchase of 150-160 meters annually for new customers.

Two new 4G routers and four battery replacements are included in the equipment repair and maintenance budget to replace the current routers (3G) on the water towers as Verizon will no longer support the 3G after December 2019. These routers support the radio read meter data collection.

Residential meters were tested at the time of meter replacement. The decrease in the number of meters tested reflects the completion of the radio read meter project in 2017. Large commercial meters will continued to be tested per Public Service Commission rules.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Reliable, accurate water usage					
# of large meters replaced	0	0	0	0	0
# of meters tested	9,266	5,879	50	175	50
# of defective meters	436	182	50	25	25
# of meters in service	27,797	27,862	27,850	27,850	28,000
Strategic Outcomes					
Implementation of system upgrade					
# of transmitter modules replaced	30	20	20	20	20
# of meters replaced	9,573	69,098	25	12	15
Work Process Outputs					
Service provided					
# of service calls	1,408	1,389	1,500	1,500	1,500
System growth					
# new customer meters installed	166	77	150	100	150

**CITY OF APPLETON 2019 BUDGET
WATER UTILITY**

Meter Operations & Maintenance

Business Unit 5352

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Expenses					
6102 Labor Pool Allocations	\$ 34,612	\$ 38,291	\$ 99,124	\$ 99,124	\$ 99,818
6104 Call Time	119	164	150	150	250
6105 Overtime	1,021	1,152	1,000	1,000	1,350
6150 Fringes	17,913	21,170	41,022	41,022	42,850
6304 Postage/Freight	-	-	100	100	-
6306 Building Maint./Janitorial	-	-	150	150	150
6309 Shop Supplies	6,639	3,499	5,900	5,900	2,450
6311 Paint & Supplies	9	2	-	-	-
6326 Equipment Parts	22	-	1,000	1,000	1,000
6327 Misc. Equipment	54	-	45,000	45,000	45,000
6408 Contractor Fees	4,189	1,820	500	500	500
6413 Utilities	490	926	1,800	1,800	1,100
6418 Equipment Repairs & Maint.	122	205	1,100	1,100	2,500
6424 Software Support	26,046	30,056	53,870	53,870	53,870
6425 CEA Equip. Rental	2,967	6,248	11,050	11,050	11,650
6804 Machinery & Equipment	-	-	-	23,700	-
Total Expense	\$ 94,203	\$ 103,533	\$ 261,766	\$ 285,466	262,488

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

Misc Equipment

Meters - 160 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 2019 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:

Increase in contractor fees is due to both the increasing number of water patches needing to be done as well as the amount per hydrant and number of hydrants to be sand blasted and painted on arterial streets.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Reliable source at adequate pressure					
Hydrants					
Replace/Upgrade	4	5	5	5	5
% of hydrants flushed	100%	100%	100%	100%	100%
Water loss reported	13%	15%	12%	12%	10%
Strategic Outcomes					
Reliability of the system					
# water main breaks	92	91	80	82	80
Work Process Outputs					
Preventive maintenance					
# services replaced	19	33	25	5	23
# valves exercised	1,506	2,144	1,500	2,400	2,300
# valves replaced	1	4	5	5	5
# curb boxes repaired	154	226	250	250	250
# valves repaired	27	53	75	75	75
# of service leaks	2	3	2	4	2

CITY OF APPLETON 2019 BUDGET

WATER UTILITY

Distribution Operations and Maintenance

Business Unit 5353

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Expenses					
6101 Regular Salaries	\$ 422,461	\$ 481,298	\$ 550,964	\$ 550,964	\$ 548,791
6104 Call Time	16,533	14,661	12,325	12,325	16,850
6105 Overtime	51,426	47,548	35,700	35,700	36,500
6108 Part-Time	3,699	6,469	6,060	6,060	6,738
6150 Fringes	195,869	225,964	267,496	267,496	252,242
6308 Landscape Supplies	576	682	1,000	1,000	1,000
6309 Shop Supplies & Tools	9,386	5,936	8,150	8,150	8,150
6311 Paint & Supplies	672	639	1,375	1,375	1,100
6316 Miscellaneous Supplies	22,002	11,000	-	-	-
6322 Gas Purchases	76	-	50	50	50
6323 Safety Supplies	-	94	-	-	-
6325 Construction Materials	59,575	79,410	101,000	101,000	101,000
6326 Equipment Parts	63,171	82,321	86,000	86,000	89,000
6327 Miscellaneous Equipment	12,464	14,999	20,500	30,135	16,100
6328 Signs	1,151	884	-	-	-
6408 Contractor Fees	57,313	123,183	85,500	235,500	120,500
6415 Tipping Fees	9,000	10,578	20,000	20,000	17,000
6418 Equip Repairs & Maint	1,335	639	1,500	1,500	1,000
6425 CEA Equip. Rental	151,924	234,599	280,578	280,578	313,965
6503 Rent	1,205	-	1,000	1,000	1,000
6899 Other Capital Outlay	(26,257)	(21,095)	-	-	-
Total Expense	\$ 1,053,581	\$ 1,319,809	\$ 1,479,198	\$ 1,638,833	1,530,986

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

Construction Materials

Asphalt	\$ 44,000
Gravel	19,500
Slurry	8,500
Stone	2,000
Concrete	17,000
Other materials	10,000
	<u>\$ 101,000</u>

Contractor Fees

Surface restoration	\$ 95,000
Contractor services for main/valve break & repair	10,000
Hydrant painting	15,500
	<u>\$ 120,500</u>

Equipment Parts

Fittings, clamps, pipe, etc. for main/valve break repair	\$ 40,000
Valves, sleeves, boxes, pipe & connectors for service laterals/curbs	19,000
Hydrant repair parts	30,000
	<u>\$ 89,000</u>

Tipping Fees

Water main breaks	\$ 13,000
Pavement removal from in-house patch program	4,000
	<u>\$ 17,000</u>

Miscellaneous Equipment

Barricades & Cones	\$ 4,000
RP Valve Replacement	4,150
Fire hose gauges	950
Ground microphone	5,000
Trash pump	1,500
Chlorine tester	500
	<u>\$ 16,100</u>

**CITY OF APPLETON 2019 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 2019 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 2019 CIPs:

Water main construction	<u>2019 Budget</u>	<u>Page</u>
	3,801,052	Projects, Pg. 594
	<u>\$ 3,801,052</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 water main program.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Reliable and adequate service					
% of reconstructed streets with relay	100%	100%	100%	100%	100%
# of low flow hydrants eliminated	5	4	5	5	5
Strategic Outcomes					
System size					
Miles of mains	374	377	377	377	377
% of total miles of mains reconstructed	0.69%	0.65%	0.87%	0.87%	1.14%
# of hydrants in the City	3,361	3,383	3,368	3,368	3,368
# of low flow hydrants in the City	72	76	75	75	70
Work Process Outputs					
System expansion and improvement					
Miles of transmission lines added	0.35	0.21	0.00	0.00	0.00
Miles of existing mains re-laid	2.58	2.46	3.28	3.28	4.33

**CITY OF APPLETON 2019 BUDGET
WATER UTILITY**

Distribution Capital Improvements

Business Unit 5370

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Expenses					
6101 Regular Salaries	\$ 25,485	\$ 46,380	\$ 190,445	\$ 190,445	\$ 175,896
6104 Call Time	103	234	-	-	-
6105 Overtime	6,853	9,347	5,143	5,143	5,000
6108 Part-Time	261	815	3,330	3,330	2,912
6150 Fringes	10,001	25,021	59,629	59,629	64,998
6304 Postage\Freight	8,487	5,123	-	-	-
6309 Shop Supplies & Tools	234	170	-	-	-
6320 Printing & Reproduction	2,098	1,129	-	-	-
6325 Construction Materials	-	1,168	-	-	-
6326 Equipment Parts	2,043	21,483	-	-	-
6404 Consulting	4,192	7,339	10,000	10,000	100,000
6408 Contractor Fees	8,100	26,832	25,000	25,000	-
6425 CEA Equipment Rental	-	-	6,200	6,200	6,200
6599 Other Contracts/Obligations	548	250	-	24,300	-
6804 Machinery & Equipment	1,120,172	158,749	45,000	45,000	-
6809 Infrastructure Construction	2,209,571	3,041,086	3,159,100	3,269,951	3,445,400
6899 Other Capital Outlay	(3,355,444)	(3,210,214)	-	-	-
Total Expense	\$ 42,704	\$ 134,912	\$ 3,503,847	\$ 3,638,998	3,800,406

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

	Street	From	To	Water Utility
Labor Pool				248,806
CEA				6,200
Miscellaneous	Edison River Crossing design			100,000
Construction	Permit;Fees;Train;Test	NOI, Railroad, Water Usage, County		10,000
	Surface Restoration	Due to 2018 Water CIP Excav.		141,300
	Subtotal			251,300
New Construction	Easement w/o Walter	Gunn St	Harriet St	51,000
	Apple Ridge Watermain Loop			80,000
	Haymeadow Ave	Bluewater Way	Spartan Ave	86,250
	Sommers Dr	Spartan Ave, 100'	Spartan Ave, 400'	59,500
	Spartan Dr	Trico	Haymeadow Ave	305,250
	Subtotal			582,000
Reconstruction (not related to paving)	Gunn St (Rec "E" 2007 Study)	Walter Ave	west end	64,750
	Walter Ave (Rec "E" 2007 Study)	College Ave	Gunn St	37,750
	Subtotal			102,500
Reconstruction (prior to next year's paving)	Carpenter St	Fremont St	Calumet St	233,000
	Erb St	Michigan St	Michigan St	24,250
	Harriet St (Rec "E" 2007 Study)	Walter Ave	west end	64,750
	Henry St	Warner Rd	Telulah Ave	75,000
	Morrison St	Hancock St	Wisconsin Ave	206,750
	Outagamie St - partial only	Taylor St	Glendale Ave	86,000
	Prospect Ave	Bartell Dr	Haskell St	625,000
	Prospect Ave (CTH BB)	Seminole Dr	Bartell Dr	412,000
	Randall St	Oneida St	Meade St	314,000
	State St - partial only	Prospect Ave	Sixth St	197,100
	Warner St	College Ave	Henry St	37,000
	Winnebago St	Division St	Drew St	334,750
	Subtotal			2,609,600
Transmission				-
	Subtotal			-
Total Water Construction				3,800,406

Description	2016 Actual	2017 Actual	2018 YTD Actual	2018 Adopted Budget	2018 Amended Budget	2019 Requested Budget	2019 Adopted Budget
REVENUES							
Permits	210	180	70	200	200	200	200
Interest Income	132,716	177,734	112,200	250,000	250,000	125,000	125,000
Charges for Services	20,617,927	20,309,883	8,979,995	20,505,500	20,505,500	20,288,500	20,288,500
Other Revenues	1,279,557	2,081,248	846,933	1,655,882	1,655,882	424,000	1,461,499
TOTAL REVENUES	22,030,410	22,569,045	9,939,198	22,411,582	22,411,582	20,837,700	21,875,199
EXPENSES BY LINE ITEM							
Regular Salaries	317,975	339,047	240,531	354,556	354,556	364,532	364,532
Labor Pool Allocations	1,194,668	1,241,339	1,137,735	1,777,816	1,777,816	1,783,236	1,783,236
Call Time	18,978	16,895	10,918	16,534	16,534	20,800	20,800
Overtime	152,708	111,386	81,773	131,119	131,119	126,127	126,127
Part-Time	14,507	9,766	10,875	12,188	12,188	19,200	19,200
Other Compensation	8,623	9,237	12,745	11,135	11,135	13,446	13,446
Shift Differential	2,499	2,007	648	2,490	2,490	0	0
Sick Pay	13,252	401	42,058	0	0	0	0
Vacation Pay	210,457	251,908	159,858	0	0	0	0
Fringes	715,716	770,992	598,442	855,140	855,140	881,145	872,123
FICA	0	590	0	0	0	0	0
Pension expense / revenue	127,442	149,261	0	0	0	0	0
Salaries & Fringe Benefits	2,776,825	2,902,027	2,295,583	3,160,978	3,160,978	3,208,486	3,199,464
Training & Conferences	5,185	3,736	4,028	13,500	13,500	9,500	9,500
Memberships & Licenses	8,444	8,932	8,828	8,870	8,870	8,845	8,845
Postage & Freight	28,350	25,816	11,373	25,550	25,550	28,450	25,450
Awards & Recognition	791	819	263	875	875	875	875
Building Maintenance/Janitor.	4,467	4,940	4,966	4,700	4,700	4,750	4,750
Food & Provisions	316	227	120	280	280	280	280
Interfund Allocations	480	1,135	0	0	0	0	0
Insurance	111,462	132,444	95,778	127,710	127,710	119,350	119,350
Rent	1,205	0	0	1,000	1,000	1,000	1,000
Depreciation Expense	4,517,926	4,532,727	3,694,094	5,065,000	5,065,000	0	4,900,000
Uncollectible Accounts	3,935	3,696	1,425	8,000	8,000	5,000	5,000
Bond Interest Payments	2,861,629	2,095,814	1,548,297	2,021,665	2,021,665	1,787,765	1,822,765
Debt Issuance Costs	286,749	20,500	1,000	85,000	85,000	85,000	85,000
Gain/Loss on Refund Amort.	209,559	229,729	205,299	273,727	273,727	0	245,210
Trans Out - General Fund	1,854,086	1,855,297	1,444,275	2,013,800	2,013,800	0	1,948,800
Administrative Expense	9,893,624	8,913,542	7,019,746	9,649,677	9,649,677	2,050,815	9,176,825
Landscape Supplies	576	682	0	1,000	1,000	1,000	1,000
Shop Supplies & Tools	26,127	20,900	21,067	25,600	25,600	24,150	24,150
Chemicals	1,322,812	1,115,536	534,985	1,369,000	1,369,000	1,343,000	1,343,000
Treatment Chemicals	1,974	1,348	1,235	3,500	3,500	3,500	3,500
Paint & Supplies	681	641	678	1,375	1,375	1,100	1,100
Miscellaneous Supplies	22,360	11,000	0	0	0	0	0
Materials	11,977	1,603	0	0	0	0	0
Printing & Reproduction	17,201	16,857	5,563	15,900	15,900	18,600	18,600
Clothing	2,986	2,992	2,681	4,100	4,100	4,000	4,000
Gas Purchases	12,443	10,511	7,905	10,050	10,050	10,050	10,050
Safety Supplies	2,577	7,864	2,474	7,100	7,100	7,100	7,100
Medical & Lab Supplies	62,945	41,785	20,623	38,950	38,950	38,950	38,950
Construction Materials	59,575	80,577	47,805	101,000	101,000	101,000	101,000
Vehicle & Equipment Parts	66,065	108,651	89,493	129,000	129,000	146,000	146,000
Miscellaneous Equipment	37,490	28,455	62,356	116,450	126,085	89,350	89,350
Signs	1,150	884	0	0	0	0	0
Supplies & Materials	1,648,939	1,450,286	796,865	1,823,025	1,832,660	1,787,800	1,787,800
Accounting/Audit	11,140	11,195	0	9,360	9,360	11,500	11,500
Legal Fees	22,467	19,774	0	23,000	23,000	24,000	24,000
Bank Services	22,034	19,666	11,406	23,000	23,000	22,000	22,000
Consulting Services	87,854	94,976	61,071	270,000	391,660	932,000	1,632,000
Collection Services	1,933	1,908	2,117	2,850	2,850	2,350	2,350
Contractor Fees	216,867	746,856	306,187	660,990	1,579,955	153,440	878,440

City of Appleton
2019 Budget
Revenue and Expense Summary

Description	2016 Actual	2017 Actual	2018 YTD Actual	2018 Adopted Budget	2018 Amended Budget	2019 Requested Budget	2019 Adopted Budget
Advertising	0	0	299	1,000	1,000	1,000	1,000
Tipping Fees	9,000	10,578	11,373	20,000	20,000	17,000	17,000
Health Services	0	20	0	50	50	50	50
Lab Fees	16,849	11,944	13,764	20,300	20,300	15,890	15,890
Snow Removal Services	5,520	1,580	5,956	5,000	5,000	5,000	5,000
Other Contracts/Obligations	27,908	28,568	43,544	32,815	57,115	33,815	33,815
Purchased Services	421,572	947,065	455,717	1,068,365	2,133,290	1,218,045	2,643,045
Electric	675,874	593,649	406,240	643,970	643,970	724,970	724,970
Gas	96,467	92,645	87,987	111,790	111,790	33,790	33,790
Water	131,758	112,864	102,480	144,120	144,120	139,120	139,120
Waste Disposal/Collection	18,196	16,940	15,726	21,790	21,790	1,790	1,790
Lime Disposal	1,723,015	1,532,687	1,070,559	1,850,000	1,850,000	1,750,000	1,750,000
Stormwater	24,928	25,708	16,483	26,366	26,366	28,765	28,765
Telephone	16,713	17,087	12,817	17,760	17,760	17,760	17,760
Cellular Telephone	8,405	9,647	6,855	10,050	10,050	10,050	10,050
Utilities	2,695,356	2,401,227	1,719,147	2,825,846	2,825,846	2,706,245	2,706,245
Building Repair & Maintenance	412,349	105	33,444	70,000	70,000	125,000	125,000
Equipment Repair & Maintenance	39,571	23,587	4,878	57,600	57,600	33,500	33,500
Facilities Charges	265,747	234,092	164,579	290,589	290,589	298,854	298,854
Software Support	40,487	51,465	100,108	70,110	70,110	74,265	74,265
CEA Equipment Rental	179,913	262,545	213,973	320,358	320,358	360,258	360,258
Grounds Repair & Maintenance	6,286	8,793	6,479	7,500	7,500	4,000	4,000
Repair & Maintenance	944,353	580,587	523,461	816,157	816,157	895,877	895,877
Land Improvements	0	101,637	0	0	0	65,000	65,000
Buildings	125,101	0	0	0	0	100,000	100,000
Machinery & Equipment	2,623,190	164,524	46,056	120,000	173,700	0	0
Infrastructure Construction	2,209,571	3,041,085	2,013,953	3,159,100	3,269,951	3,445,400	3,445,400
Other Capital Outlay	5,167,714	3,394,035	0	0	0	0	0
Capital Expenditures	209,852	86,789	2,060,009	3,279,100	3,443,651	3,610,400	3,610,400
TOTAL EXPENSES	18,170,817	17,107,945	14,870,528	22,623,148	23,862,259	15,477,668	24,019,656

CITY OF APPLETON 2019 BUDGET
WATER UTILITY
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS

	2016 Actual	2017 Actual	2018 Budget	2018 Projected	2019 Budget
Revenues					
Charges for Services	\$ 20,617,927	\$ 20,321,981	\$ 20,505,500	\$ 20,288,500	\$ 20,288,500
Miscellaneous	599,764	693,499	622,200	612,200	602,200
Total Revenues	<u>21,217,691</u>	<u>21,015,480</u>	<u>21,127,700</u>	<u>20,900,700</u>	<u>20,890,700</u>
Expenses					
Operation and Maintenance	8,440,868	8,373,876	8,960,109	9,233,459	9,652,475
Depreciation	4,517,926	4,532,727	5,065,000	4,850,000	4,900,000
Total Expenses	<u>12,958,794</u>	<u>12,906,603</u>	<u>14,025,109</u>	<u>14,083,459</u>	<u>14,552,475</u>
Operating Income (Loss)	8,258,897	8,108,877	7,102,591	6,817,241	6,338,225
Non-Operating Revenues (Expenses)					
Investment Income	132,716	177,736	250,000	125,000	125,000
Interest Expense	(2,861,629)	(2,095,814)	(2,021,665)	(1,983,665)	(1,822,765)
Gain/Loss on Refunding	(209,559)	(229,730)	(273,727)	(273,727)	(245,210)
Gain/Loss on Asset Disposal	-	(39,965)	-	-	-
Amortization of Premium on Debt	319,443	660,996	716,132	716,132	625,199
Debt Issue Costs	(286,749)	(20,500)	(85,000)	-	(85,000)
Other	4,753	17,898	5,000	5,000	5,000
Total Non-Operating	<u>(2,901,025)</u>	<u>(1,529,379)</u>	<u>(1,409,260)</u>	<u>(1,411,260)</u>	<u>(1,397,776)</u>
Net Income Before Contributions and Transfers	5,357,872	6,579,498	5,693,331	5,405,981	4,940,449
Contributions and Transfers In (Out)					
Capital Contributions	355,807	736,903	312,750	-	229,300
General Fund	(13,800)	(13,800)	(13,800)	(13,800)	(13,800)
Tax Equivalent	(1,840,286)	(1,841,497)	(2,000,000)	(1,906,000)	(1,935,000)
Change in Net Assets	3,859,593	5,461,104	3,992,281	3,486,181	3,220,949
Net Assets - Beginning	<u>79,716,005</u>	<u>83,575,598</u>	<u>89,036,702</u>	<u>89,036,702</u>	<u>92,522,883</u>
Net Assets - Ending	<u>\$ 83,575,598</u>	<u>\$ 89,036,702</u>	<u>\$ 93,028,983</u>	<u>\$ 92,522,883</u>	<u>\$ 95,743,832</u>

SCHEDULE OF CASH FLOWS

Working Cash - Beginning of Year	\$ 13,334,155	\$ 9,625,728
+ Change in Net Assets	3,486,181	3,220,949
- Capital Contributions	-	(229,300)
+ Depreciation	4,850,000	4,900,000
+ Long Term Debt	-	3,500,000
- Fixed Assets	(5,144,608)	(5,365,406)
- Principal Repayment	(6,900,000)	(6,585,000)
Working Cash - End of Year	<u>\$ 9,625,728</u>	<u>\$ 9,066,971</u>

**CITY OF APPLETON 2019 BUDGET
WATER UTILITY
CALCULATION OF RATE INCREASE DOCUMENTATION**

	2018 Budget	2018 Projected	2019 Budget	2020 Projected	2021 Projected	2022 Projected	2023 Projected
Revenues							
Charges for Services	\$20,505,500	\$20,288,500	\$20,288,500	\$ 20,389,943	\$ 20,491,892	\$ 20,594,352	\$ 20,697,323
Miscellaneous	622,200	612,200	602,200	614,244	626,529	639,059	651,841
Total Revenues	<u>21,127,700</u>	<u>20,900,700</u>	<u>20,890,700</u>	<u>21,004,187</u>	<u>21,118,421</u>	<u>21,233,411</u>	<u>21,349,164</u>
Expenses							
Operating Expenses	8,960,109	9,233,459	9,652,475	9,542,049	9,980,311	9,814,720	10,109,162
Depreciation	5,065,000	4,850,000	4,900,000	5,025,000	5,192,500	5,367,500	5,492,500
Total Expenses	<u>14,025,109</u>	<u>14,083,459</u>	<u>14,552,475</u>	<u>14,567,049</u>	<u>15,172,811</u>	<u>15,182,220</u>	<u>15,601,662</u>
Operating Income	7,102,591	6,817,241	6,338,225	6,437,137	5,945,610	6,051,191	5,747,502
Non-Operating Revenues (Expenses)							
Interest Income	250,000	125,000	125,000	150,000	150,000	150,000	150,000
Interest Expense	(2,021,665)	(1,983,665)	(1,822,765)	(1,775,165)	(1,833,315)	(1,674,515)	(1,628,965)
Gain/Loss on Refunding	(273,727)	(273,727)	(245,210)	(212,552)	(179,806)	(146,991)	(119,447)
Amortization of Debt Premium	716,132	716,132	625,199	509,650	383,341	256,901	180,120
Debt Issuance Expense	(85,000)	-	(85,000)	(85,000)	(85,000)	(85,000)	-
Other	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Total Non-Operating	<u>(1,409,260)</u>	<u>(1,411,260)</u>	<u>(1,397,776)</u>	<u>(1,408,067)</u>	<u>(1,559,780)</u>	<u>(1,494,605)</u>	<u>(1,413,292)</u>
Net Income Before Transfers	5,693,331	5,405,981	4,940,449	5,029,070	4,385,830	4,556,586	4,334,210
Contributions and Transfers In (Out)							
Capital Contributions	312,750	-	229,300	237,775	-	160,060	363,900
Trans Out - General Fund	(13,800)	(13,800)	(13,800)	(13,800)	(13,800)	(13,800)	(13,800)
Tax Equivalent	(2,000,000)	(1,906,000)	(1,935,000)	(2,085,000)	(2,235,000)	(2,385,000)	(2,535,000)
Change in Net Assets	3,992,281	3,486,181	3,220,949	3,168,045	2,137,030	2,317,846	2,149,310
Total Net Assets - Beginning	89,036,702	89,036,702	92,522,883	95,743,832	98,911,877	101,048,907	103,366,753
Total Net Assets - Ending	<u>\$93,028,983</u>	<u>\$92,522,883</u>	<u>\$95,743,832</u>	<u>\$ 98,911,877</u>	<u>\$ 101,048,907</u>	<u>\$ 103,366,753</u>	<u>\$ 105,516,064</u>

SCHEDULE OF CASH FLOWS

Cash - Beginning of the Year	13,334,155	9,625,728	9,066,971	7,043,834	6,765,882	6,008,546	
+ Change in Net Assets	3,486,181	3,220,949	3,168,045	2,137,030	2,317,846	2,149,310	
+ Depreciation	4,850,000	4,900,000	5,025,000	5,192,500	5,367,500	5,492,500	
+ Long Term Debt	-	3,500,000	9,500,000	2,500,000	3,100,000	-	
- Contributed Capital	-	(229,300)	(237,775)	-	(160,060)	(363,900)	
- Fixed Assets	(5,144,608)	(5,365,406)	(12,678,407)	(3,262,482)	(4,197,622)	(4,061,867)	
- 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>\$ 9,625,728</u>	<u>\$ 9,066,971</u>	<u>\$ 7,043,834</u>	<u>\$ 6,765,882</u>	<u>\$ 6,008,546</u>	<u>\$ 5,639,590</u>	
25% Working Capital Reserve (prior year's audited expenses)		3,280,781	3,352,560	3,350,554	3,512,156	3,468,559	
Coverage Ratio		1.46	1.41	1.41	1.31	1.28	2.25

ASSUMPTIONS:

Borrow 75% of capital expenditures as detailed in the five year plan for years 2019-2023.
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 2019.
Included in O&M expense is the painting 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 revenue projections shown reflect the current rates. A rate study would be completed in the year prior to any anticipated rate increase. The current water rates were effective 12/30/2010.

**CITY OF APPLETON 2019 BUDGET
WATER UTILITY
LONG TERM DEBT**

	2011 Revenue Bonds		2012 Revenue Bonds		2013 Revenue Bonds	
	Principal	Interest	Principal	Interest	Principal	Interest
2019	\$ 145,000	\$ 90,260	\$ 115,000	\$ 58,155	\$ 300,000	\$ 241,850
2020	150,000	84,260	120,000	54,555	310,000	232,550
2021	155,000	78,060	125,000	50,805	320,000	219,750
2022	160,000	71,660	125,000	47,055	335,000	206,350
2023	170,000	64,860	130,000	43,155	350,000	192,350
2024	175,000	57,860	135,000	39,105	365,000	177,750
2025	180,000	50,660	140,000	34,765	380,000	162,550
2026	190,000	43,060	145,000	30,270	395,000	145,388
2027	195,000	35,260	145,000	25,775	410,000	127,588
2028	205,000	27,060	150,000	21,125	430,000	108,938
2029	215,000	18,460	155,000	16,088	450,000	89,250
2030	220,000	9,660	160,000	10,888	470,000	68,688
2031	230,000	-	165,000	5,525	490,000	47,250
2032	-	-	170,000	-	515,000	24,075
2033	-	-	-	-	535,000	-
	<u>\$ 2,390,000</u>	<u>\$ 631,120</u>	<u>\$ 1,980,000</u>	<u>\$ 437,266</u>	<u>\$ 6,055,000</u>	<u>\$ 2,044,327</u>

	2014 Revenue Bonds		2015 Revenue Bonds		2015 Refunding Bonds	
	Principal	Interest	Principal	Interest	Principal	Interest
2019	\$ 165,000	\$ 119,800	\$ 220,000	\$ 173,200	\$ 1,570,000	\$ 510,800
2020	165,000	114,850	230,000	166,300	1,615,000	462,350
2021	170,000	109,750	235,000	159,250	1,665,000	412,400
2022	175,000	104,500	240,000	152,050	1,720,000	360,800
2023	180,000	99,100	250,000	142,050	1,775,000	289,800
2024	190,000	93,400	260,000	131,650	1,850,000	215,800
2025	195,000	85,600	270,000	120,850	1,920,000	139,000
2026	200,000	77,600	280,000	112,450	1,990,000	79,300
2027	210,000	69,200	290,000	103,750	1,110,000	46,000
2028	220,000	60,400	300,000	91,750	1,150,000	-
2029	230,000	51,200	310,000	79,350	-	-
2030	235,000	41,800	325,000	66,350	-	-
2031	245,000	32,000	340,000	52,750	-	-
2032	255,000	21,800	350,000	41,375	-	-
2033	265,000	11,200	365,000	26,775	-	-
2034	280,000	-	375,000	13,650	-	-
2035	-	-	390,000	-	-	-
	<u>\$ 3,380,000</u>	<u>\$ 1,092,200</u>	<u>\$ 5,030,000</u>	<u>\$ 1,633,550</u>	<u>\$ 16,365,000</u>	<u>\$ 2,516,250</u>

	2016 Revenue Bonds		2016 Refunding Bonds		TOTAL		Total
	Principal	Interest	Principal	Interest	Principal	Interest	
2019	\$ 135,000	\$ 110,350	\$ 3,935,000	\$ 483,350	\$ 6,585,000	\$ 1,787,765	\$ 8,372,765
2020	140,000	104,750	4,070,000	320,550	6,800,000	1,540,165	8,340,165
2021	145,000	98,950	3,920,000	163,750	6,735,000	1,292,715	8,027,715
2022	150,000	92,950	4,075,000	750	6,980,000	1,036,115	8,016,115
2023	160,000	88,150	15,000	300	3,030,000	919,765	3,949,765
2024	160,000	83,350	10,000	-	3,145,000	798,915	3,943,915
2025	165,000	78,400	-	-	3,250,000	671,825	3,921,825
2026	170,000	73,300	-	-	3,370,000	561,368	3,931,368
2027	180,000	66,100	-	-	2,540,000	473,673	3,013,673
2028	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>\$ 3,345,000</u>	<u>\$ 1,054,400</u>	<u>\$ 16,025,000</u>	<u>\$ 968,700</u>	<u>\$ 54,570,000</u>	<u>\$ 10,377,813</u>	<u>\$ 64,947,813</u>

Note: Schedule is based on accrual method of accounting. Revenue Bonds in the amount of \$3,500,000 will be issued in 2019. Expected interest expense of the issue in 2019 is \$35,000 at 4%.

CITY OF APPLETON 2019 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 2019 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 2018 EVENTS

WASTEWATER TREATMENT

Total Maximum Daily Load

Appleton Wastewater Treatment Plant (AWWTP) staff conducted additional jar test studies and resumed 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) under Total Maximum Daily Load (TMDL). Plant staff also continued to evaluate alternative compliance opportunities available through Water Quality Trading (WQT) and Adaptive Management (AM).

F2 Building Chemical Storage Room Improvements

This CIP involved the rehabilitation of the existing iron salt chemical storage room after 22 years of continuous use. It also incorporated improvements to the chemical feed system to facilitate precision chemical dosing necessary to consistently achieve future low-level phosphorus limits. Construction was initiated in early 2018 and completed in August 2018.

Digester Compressor Glycol System, Waste Activated Sludge (WAS) Pump Replacement, Effluent Pump Firm Capacity, and Aeration Blower Replacement

The CIP involves equipment rehabilitation, replacement, and improvements to address immediate needs and long term reliability associated with four independent processes. The preliminary engineering phase provided a conditions assessment and project alternatives technical memorandum (TM). Additional engineering analysis was required in 2018 to deliver answers associated with hydraulic capacity and aeration blower sizing that contributed to a delay with overall project schedule. The project bidding phase occurred in late 2018 and final construction completion forecasted in late 2019 or early 2020.

Briarcliff Lift Station

Engineering was initiated in early 2018. Preliminary concepts and costs were provided for review. The high estimated preliminary cost for improvements required consideration of alternative lift station equipment and designs that more appropriately match the seven home residential sewage collection area. The additional evaluation of alternatives resulted in a bidding phase that did not occur until late 2018. The revised final project completion date is mid 2019.

Midway Road Lift Station Improvements

Engineering plans were provided in 2018 to facilitate Utility maintenance vehicle emergency access off of Midway Road. This project was bundled with Briarcliff for bidding purposes. The revised final project completion is mid 2019.

Compost Site Study

In 2018, the AWWTP contracted with Coker Composting and Consulting to evaluate the transition into either full scale biosolids composting, increased onsite biosolids storage, or some combination of the two. The preliminary opinion of costs for a sludge storage building expansion that would meet future 180-day storage totaled \$7.4M. Capital costs for three alternative compost options ranged from \$8M to \$12.3M. Decisions regarding the future direction (compost or sludge storage) are expected to be known in 2019.

WASTEWATER COLLECTION

Reconstructed / rehabilitated approximately 1.84 miles of sanitary sewer and added 0.69 miles of new sewer. Televising of sanitary sewer laterals on Carpenter Street for a pilot project to replace the laterals from the house to the street. These laterals were televised to assist in data collection for the 2019 replacement program. Used the sewer televising program to resolve property owner lateral back up issues.

CITY OF APPLETON 2019 BUDGET WASTEWATER UTILITY

MAJOR 2019 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.

Continue to evaluate treatment options that are capable of achieving future water quality based effluent limits for phosphorus under NR 102, NR 217, and Lower Fox River Total Maximum Daily Load (TMDL) legislation.

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 high quality biosolids and biosolids compost 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		% Change *	
Unit	Title	2016	2017	Adopted 2018	Amended 2018		2019
Program Revenues		\$ 12,005,596	\$ 12,802,558	\$ 11,534,806	\$ 11,534,806	\$ 11,555,924	0.18%
Program Expenses							
5411	Utility Administration	249,548	259,174	288,644	288,644	318,919	10.49%
5412	Finance Administration	4,709,778	4,812,161	5,029,876	5,029,876	5,019,828	-0.20%
5422	Treatment	3,580,557	3,659,896	3,862,350	3,913,699	4,180,801	8.25%
5423	Biosolids Management	587,180	500,908	679,240	779,240	718,774	5.82%
5425	Lift Stations	133,453	127,155	127,799	192,799	132,666	3.81%
5427	Collection Systems	736,302	750,474	753,166	857,931	885,063	17.51%
5431	Public Works Capital	386,226	609,364	2,235,551	2,389,064	4,382,819	96.05%
5432	Utility Capital	82,441	323,742	3,364,250	6,619,842	5,581,000	65.89%
Total Program Expenses		\$ 10,465,485	\$ 11,042,874	\$ 16,340,876	\$ 20,071,095	\$ 21,219,870	29.86%
Expenses Comprised Of:							
Personnel		2,512,687	2,611,398	2,594,783	2,594,783	2,692,797	3.78%
Administrative Expense		4,281,424	4,391,098	4,792,672	4,792,672	4,779,865	-0.27%
Supplies & Materials		396,408	516,386	584,550	584,550	730,800	25.02%
Purchased Services		1,659,757	1,391,995	2,297,885	5,657,548	5,200,825	126.33%
Utilities		1,041,989	1,065,174	1,089,815	1,089,815	1,110,898	1.93%
Repair & Maintenance		703,223	657,748	677,095	677,095	832,660	22.98%
Capital Expenditures		(130,003)	409,075	4,304,076	4,674,632	5,872,025	36.43%
Full Time Equivalent Staff:							
Personnel allocated to programs		28.39	28.41	28.71	28.71	28.71	

* % change from prior year adopted budget

**CITY OF APPLETON 2019 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:

Special Hauled Waste revenue reflects a 1% rate increase that is effective January 1, 2019, that is subject to approval that is targeted for an October meeting.

The increase in Janitorial Supplies is due to the change in vendors resulting from an issue with the quality of product that was delivered.

Miscellaneous equipment includes costs to purchase new archive shelving.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Safe work environment					
# of workers comp. claims / year	2	1	0	0	0
# of first aid entries per year	10	5	0	0	0
Strategic Outcomes					
Effective use of budgeted funds					
% of operational budget obligated	93%	91%	100%	100%	100%
Trained Staff					
% of staff adequately trained	95%	98%	100%	100%	100%
Average # of hours training per employee	11	16	25	25	25
CMAR grade for staffing	A	A	A	A	A
CMAR grade for operations certificate	A	A	A	A	A
Work Process Outputs					
Government reports prepared					
# reports filed:					
Compliance Report (eCMAR)	1	1	1	1	1
Biosolids Annual Report	1	1	1	1	1
Pretreatment Report	2	2	2	2	2
Discharge Report (eDMR)	12	12	12	12	12

**CITY OF APPLETON 2019 BUDGET
WASTEWATER UTILITY**

Utility Administration

Business Unit 5411

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Revenues					
4710 Interest on Investments	\$ 142,454	\$ 166,155	\$ 250,000	\$ 250,000	\$ 100,000
4730 Interest - Deferred Specials	14,688	8,607	10,000	10,000	7,500
4810 Sewer Service - Residential	3,946,452	3,885,488	3,930,000	3,930,000	3,900,000
4811 Sewer Service - Commercial	957,745	937,148	960,000	960,000	950,000
4812 Sewer Service - Industrial	3,853,500	3,936,810	3,780,000	3,780,000	3,800,000
4813 Sewer Service - Municipal	281,297	281,295	275,000	275,000	280,000
4814 Industrial Pre-Treatment	5,828	3,432	5,000	5,000	5,000
4815 Sewer Service - Multi-Family	313,250	320,506	330,000	330,000	335,000
5001 Fees & Commissions	7,131	7,396	7,500	7,500	7,500
5005 Sale of City Property - Tax	190	-	-	-	-
5010 Misc. Revenue - Nontax	10,142	14,377	8,000	8,000	12,000
5011 Misc. Revenue - Tax	2,848	4,448	3,000	3,000	3,000
5021 Capital Contributions	292,031	465,556	156,550	156,550	91,025
5035 Other Reimbursements	2,420	2,318	2,500	2,500	2,500
5071 Customer Penalty	39,109	38,271	39,000	39,000	38,000
5084 Special Hauled Waste	2,161,440	2,701,512	1,750,000	1,750,000	2,000,000
Total Revenue	\$ 12,030,525	\$ 12,773,319	\$ 11,506,550	\$ 11,506,550	\$ 11,531,525
Expenses					
6101 Regular Salaries	\$ 143,558	\$ 142,289	\$ 161,602	\$ 161,602	\$ 173,961
6104 Call Time	14	-	-	-	-
6105 Overtime	329	290	2,393	2,393	2,735
6108 Part-Time	1,663	1,771	2,362	2,362	2,405
6150 Fringes	45,318	49,358	53,320	53,320	50,478
6201 Training\Conferences	9,000	10,043	7,500	7,500	12,000
6301 Office Supplies	2,773	2,159	3,000	3,000	3,000
6302 Subscriptions	267	74	100	100	100
6303 Memberships & Licenses	2,139	6,635	7,040	7,040	7,965
6304 Postage\Freight	568	843	2,500	2,500	2,500
6305 Awards & Recognition	350	219	300	300	300
6306 Janitorial Supplies	5,929	5,510	6,500	6,500	10,380
6307 Food & Provisions	400	477	400	400	400
6320 Printing & Reproduction	2,845	3,879	3,000	3,000	4,500
6321 Clothing	145	108	-	-	-
6323 Safety Supplies	6,990	8,074	5,500	5,500	5,500
6327 Misc. Equipment	4,309	1,958	5,000	5,000	13,000
6407 Collection Services	2,965	5,504	3,750	3,750	3,500
6408 Contractor Fees	1,814	2,278	3,750	3,750	3,750
6411 Temporary Help	-	434	-	-	-
6412 Advertising/Publications	56	-	1,500	1,500	1,500
6413 Utilities	14,683	15,147	15,920	15,920	16,460
6418 Equipment Repairs & Maint	47	-	-	-	-
6425 CEA Equip. Rental	3,386	2,124	3,207	3,207	4,485
Total Expense	\$ 249,548	\$ 259,174	\$ 288,644	\$ 288,644	\$ 318,919

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

None

**CITY OF APPLETON 2019 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 2019 budget also reflects the return to operations and maintenance costs of operating the fully installed system and the allocation of the customer use portal fees.

The budget includes \$10,000 for costs to begin the rate study process. The projected five-year financial plan requires a rate increase to cover operation and debt expenses and to provide funding for the capital improvement plan. The rate study will also review needs to add a phosphorus rate for high strength industrial customers.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Timely and accurate posting of overhead expenses % of months posted within 10 days of end of month	75%	92%	92%	92%	92%
Strategic Outcomes					
Maintain compliance with GAAP # of audit compliance issues not raised by staff	0	0	0	0	0
CMAR grade Financial management	A	A	A	A	A
Work Process Outputs					
# of monthly bills processed	113,922	114,562	114,000	114,600	114,600

**CITY OF APPLETON 2019 BUDGET
WASTEWATER UTILITY**

Finance Administration

Business Unit 5412

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Revenues					
5006 Gain (Loss) on Asset Disp.	\$ (57,030)	\$ -	\$ -	\$ -	\$ -
5086 Premium on Debt Issue	18,773	18,053	17,256	17,256	16,399
	<u>\$ (38,257)</u>	<u>\$ 18,053</u>	<u>\$ 17,256</u>	<u>\$ 17,256</u>	<u>\$ 16,399</u>
Expenses					
6101 Regular Salaries	\$ 105,081	\$ 107,559	\$ 114,040	\$ 114,040	\$ 116,036
6105 Overtime	298	169	-	-	-
6150 Fringes	249,399	244,254	48,589	48,589	49,317
6304 Postage\Freight	18,248	20,053	24,000	24,000	23,000
6320 Printing & Reproduction	2,392	3,387	3,300	3,300	3,500
6401 Accounting/Audit	11,140	9,579	9,360	9,360	20,000
6403 Bank Services	20,170	19,484	21,500	21,500	21,500
6437 Billing Services	61,721	62,834	69,000	69,000	67,000
6501 Insurance	137,808	265,979	265,812	265,812	130,790
6601 Depreciation Expense	2,928,395	2,872,797	3,200,000	3,200,000	3,200,000
6623 Uncollectable Accounts	2,165	2,271	4,500	4,500	4,000
6631 Meter Expense	514,361	598,201	630,000	630,000	672,960
6720 Interest Payments	541,150	488,144	522,325	522,325	494,275
6730 Debt Issuance Costs	-	-	-	-	100,000
7911 Trans Out - General Fund	117,450	117,450	117,450	117,450	117,450
Total Expense	<u>\$ 4,709,778</u>	<u>\$ 4,812,161</u>	<u>\$ 5,029,876</u>	<u>\$ 5,029,876</u>	<u>\$ 5,019,828</u>

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

<u>Postage/Freight</u>		<u>Meter Expense</u>	
City service invoice postage	\$ 21,500	Allocation from Water	\$ 218,960
City service invoice folding/inserting	1,500	Meter depreciation	206,000
	<u>\$ 23,000</u>	Meter payment in lieu of tax	65,000
		Return on investment in net fixed assets - meters	183,000
			<u>\$ 672,960</u>
<u>Bank Services</u>		<u>Accounting/Audit</u>	
Banking & investment fees	\$ 21,500	Audit fees	\$ 10,000
	<u>\$ 21,500</u>	Rate Study	10,000
			<u>\$ 20,000</u>
<u>Billing Services</u>			
Sewer charges from other sanitation districts for Appleton residences served	\$ 67,000		
	<u>\$ 67,000</u>		

**CITY OF APPLETON 2019 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 2019 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. The salary budget reflects the change in allocation of .2 FTE Maintenance Specialist from the Water Utility to Wastewater Utility due to on-going maintenance needs at the Wastewater Treatment Plant and lift stations. Equipment repair and maintenance expense includes costs for clarifier re-coating.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</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	4,694 MG	4,694 MG	4,500 MG	4,500 MG	4,500MG
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	\$ 2,161,440	\$ 2,701,593	\$ 1,750,000	\$ 3,500,000	\$ 2,000,000
# of tons of hauled waste received	-	320,654	205,000	500,000	225,000
Strategic Outcomes					
CMAR grades for treatment					
Effluent quality BOD	A	A	A	A	A
Effluent quality TSS	A	A	A	A	A
Effluent quality Ammonia	A	A	A	A	A
Effluent quality Phosphorus	A	A	A	A	A
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	50	36	36	40
Record maintenance - Discharge Monitoring Report (DMR)					
# DMR - QA/QC samples completed	10,747	9,644	10,775	10,775	10,775
Improve treatment processes					
# process samples analyzed per yr*	4,346	6,197	4,500	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	503	325	350	350	350
* Includes all compliance, process and billing samples					

**CITY OF APPLETON 2019 BUDGET
WASTEWATER UTILITY**

Treatment

Business Unit 5422

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Expenses					
6101 Regular Salaries	\$ 983,893	\$ 1,003,402	\$ 994,788	\$ 994,788	\$ 1,028,382
6104 Call Time	2,527	1,995	3,106	3,106	4,000
6105 Overtime	60,303	61,192	74,612	74,612	78,129
6108 Part-Time	7,632	7,864	9,398	9,398	9,398
6150 Fringes	388,175	427,134	408,640	408,640	442,200
6309 Shop Supplies & Tools	32,384	44,683	28,000	28,000	40,000
6310 Chemicals	230,936	350,157	335,000	335,000	422,000
6321 Clothing	5,185	4,614	5,500	5,500	5,500
6322 Gas Purchases	5,766	7,019	8,250	8,250	8,250
6324 Medical / Lab Supplies	20,239	19,568	21,000	21,000	21,000
6326 Repair Parts	-	11,742	110,000	110,000	110,000
6327 Miscellaneous Equipment	47,711	36,610	24,000	24,000	79,200
6402 Legal Fees	26,729	27,077	29,250	29,250	28,850
6404 Consulting Services	5,750	29,715	38,000	84,200	37,500
6408 Contractor Fees	180,054	71,529	169,750	174,899	84,250
6413 Utilities	978,123	1,001,155	1,021,915	1,021,915	1,039,518
6415 Tipping Fees	2,761	2,503	3,500	3,500	3,500
6416 Building Repairs & Maint.	-	129	35,000	35,000	35,000
6418 Equipment Repairs & Maint	203,138	118,601	30,500	30,500	182,500
6420 Facilities Charges	379,065	416,362	446,045	446,045	453,890
6424 Software Support	12,977	9,302	14,300	14,300	14,300
6425 CEA Equip. Rental	18,448	16,795	19,821	19,821	19,459
6432 Lab Fees	1,139	9,932	15,000	15,000	17,000
6440 Snow Removal Services	2,950	2,964	3,500	3,500	3,500
6454 Grounds Repair & Maint	5,286	11,810	7,500	7,500	7,500
6599 Other Contracts/Obligations	7,211	12,152	5,975	5,975	5,975
6899 Other Capital Outlay	(27,825)	(46,110)	-	-	-
Total Expense	\$ 3,580,557	\$ 3,659,896	\$ 3,862,350	\$ 3,913,699	\$ 4,180,801

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

<u>Contractor Fees</u>		<u>Chemicals</u>	
Pipe insulation replacement	\$ 7,500	Iron salts	\$ 200,000
Painting of process piping	30,000	DAF polymer	25,000
MCC electrical testing	10,000	BFP coagulant	120,000
Struvite removal	10,000	Sodium hypochlorite	10,000
Grit removal	3,250	Sodium bisulfite	35,000
Safety inspections	5,500	Other chemicals	32,000
Lab equipment inspections	3,000		\$ 422,000
High pressure blower maintenance	15,000		
	\$ 84,250	<u>Legal Fees</u>	
		DNR Fees	\$ 28,850
			\$ 28,850
<u>Equipment Repairs & Maintenance</u>		<u>Shop Supplies & Tools</u>	
Generator maintenance	\$ 2,500	Shop supplies	\$ 12,000
Containment repairs	15,000	Cabinets & shelving	7,000
Clarifier re-coating	140,000	Supply bin parts	15,000
Repair service calls	25,000	Small hand tools	6,000
	\$ 182,500		\$ 40,000
<u>Consulting Services</u>		<u>Medical Lab Supplies</u>	
Davit safety review	\$ 7,500	Supplies	\$ 10,000
TMDL planning and regulatory report	20,000	Benchware	1,000
Miscellaneous engineering studies	10,000	Chemicals for tests	9,450
	\$ 37,500	Cylinder lease	550
			\$ 21,000
<u>Miscellaneous Equipment</u>		<u>Repair Parts</u>	
Iron analyzer	\$ 12,000	Pumps & Motors	\$ 50,000
Bio-gas flow meter	10,000	Valves, piping and bearings	40,000
Uninterruptable power supply	20,000	Inventory management	20,000
Radar level instrument	6,200		\$ 110,000
Gas mixing compressor	16,000		
Digester circulation pump	15,000		
	\$ 79,200		
<u>Lab Fees</u>		<u>Building Repairs & Maintenance</u>	
Receiving station testing	\$ 2,750	Receiving Station concrete	\$ 35,000
Process testing	7,000		\$ 35,000
High-strength customer testing	5,000		
Miscellaneous testing	2,250		
	\$ 17,000		

**CITY OF APPLETON 2019 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:

On April 1, 2017 the Biosolids Composting Facility was permitted as part of the AWWTP Wisconsin Pollutant Discharge Elimination System (WPDES) permit. The AWWTP now formally recognizes 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.

A consultant was contracted in 2018 to evaluate the transition into either full scale biosolids composting or increased onsite biosolids storage. The preliminary opinion of costs for a sludge storage building expansion that would meet future 180-day storage totaled \$7.4M. The capital costs for three alternative compost options ranged from \$8M to \$12.3M. Decisions regarding the future direction (compost or sludge storage) are expected to be known in 2019 which could significantly impact future program expenditures.

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

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</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	22,444	22,825	23,000	23,000	23,000
Wet tons landfilled	0	0	0	0	0
Wet tons composted	2,246	0	3,750	2,612	3,750
CMAR grades for treatment					
Biosolids quality and management	A	A	A	A	A
Work Process Outputs					
Biosolids production and storage					
Tons of biosolids produced	25,292	23,177	26,000	26,000	26,000
CMAR Compliance					
# of site monitorings completed	42	51	40	50	40

**CITY OF APPLETON 2019 BUDGET
WASTEWATER UTILITY**

Biosolids Management

Business Unit 5423

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Expenses					
6101 Regular Salaries	\$ 71,044	\$ 69,768	\$ 71,548	\$ 71,548	\$ 79,553
6104 Call Time	239	163	-	-	-
6105 Overtime	1,941	2,722	2,598	2,598	2,686
6108 Part Time	531	81	-	-	-
6150 Fringes	28,943	30,673	26,842	26,842	28,229
6316 Other Misc Supplies	-	4,137	1,000	1,000	1,000
6322 Gas Purchases	2,593	768	150	150	150
6327 Miscellaneous Equipment	306	-	10,000	10,000	-
6404 Consulting Services	12,633	-	-	100,000	-
6408 Contractor Fees	413,821	355,173	480,000	480,000	530,250
6413 Utilities	309	341	450	450	450
6416 Building Repair & Maint	-	-	10,000	10,000	-
6425 CEA Equip. Rental	16,842	20,047	18,602	18,602	19,706
6432 Lab Fees	-	2,430	10,050	10,050	8,750
6599 Other Contracts/Obligations	37,978	14,605	48,000	48,000	48,000
Total Expense	<u>\$ 587,180</u>	<u>\$ 500,908</u>	<u>\$ 679,240</u>	<u>\$ 779,240</u>	<u>\$ 718,774</u>

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

Contractor Fees

Compost pad processing	150,000
Biosolids transport / application	350,000
Biosolids incorporation	30,250
	<u>\$ 530,250</u>

Other Contracts/Obligations

City staff hauling to compost site	\$ 40,000
City staff brush handling	3,000
Pad maintenance by City staff	5,000
	<u>\$ 48,000</u>

**CITY OF APPLETON 2019 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 13 lift stations where sewage is pumped to the wastewater plant for processing.

Major changes in Revenue, Expenditures or Programs:

The Catherine Street lift station was fully abandoned in 2018 following the construction of new gravity sewage collection sewer.

A new developer owned temporary lift station located north of Edgewood Drive and east of French Road is scheduled for construction in 2019. AWWTP staff will be required to service the lift station as part of the development agreement through the period until which a permanent City owned and maintained lift station is constructed.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</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	10	12	5	10	5
Work Process Outputs					
Response to work orders # of preventive work orders	202	169	160	200	160
# of corrective work orders	21	25	50	25	50

**CITY OF APPLETON 2019 BUDGET
WASTEWATER UTILITY**

Lift Stations

Business Unit 5425

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Expenses					
6101 Regular Salaries	\$ 33,626	\$ 41,529	\$ 36,428	\$ 36,428	\$ 37,774
6104 Call Time	1,235	1,570	2,500	2,500	1,200
6105 Overtime	1,799	1,974	2,014	2,014	2,088
6108 Part Time	149	433	-	-	-
6150 Fringes	14,951	19,620	16,907	16,907	17,514
6326 Repair Parts	-	36	-	-	-
6327 Miscellaneous Equipment	17,606	3,389	1,600	1,600	-
6404 Consulting Services	-	-	5,000	5,000	5,000
6408 Contractor Fees	9,371	4,513	11,000	76,000	10,000
6413 Utilities	38,805	39,291	41,350	41,350	44,290
6418 Equip Repairs & Maint	15,613	14,800	11,000	11,000	14,800
6420 Facilities Charges	-	-	-	-	-
6424 Software Support	-	-	-	-	-
6599 Other Contracts / Obligations	298	-	-	-	-
Total Expense	\$ 133,453	\$ 127,155	\$ 127,799	\$ 192,799	\$ 132,666

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

**CITY OF APPLETON 2019 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 2019 CIPs:

	2019 Budget	Page
Compressor replacement	\$ 130,000	Projects, Pg. 643
Piping Projects - Bended Sludge, Waste Gas, and Filtrate Piping	1,141,000	Projects, Pg. 645
Lift Station improvement	200,000	Projects, Pg. 644
RAS Pump Replacement	560,000	Projects, Pg. 646
Sludge Storage Building/Compost Facility	750,000	Projects, Pg. 625
Water lateral replacement	225,000	Projects, Pg. 618
Upgrade electrical distribution system	1,800,000	Projects, Pg. 609
Roadway replacement	300,000	Projects, Pg. 613
S-Building and L-Building air handling unit upgrades	400,000	Projects, Pg. 614
Lighting upgrades	75,000	Projects, Pg. 616
	<u>\$ 5,581,000</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:

The current AWWTP WPDES permit expires on March 31, 2022. Prior to that date the AWWTP staff will be required to submit yearly reports to the DNR on how progress with TMDL phosphorus and total suspended solids effluent limits will be achieved by January 1, 2023. Treatment optimization and the feasibility of alternative compliance through adaptive management or water quality trading will determine the path, scope, and cost of compliance with the more stringent effluent limits leading up to the 2022 WPDES permit reissuance process.

The \$750,000 allocated to engineering for biosolids facility is based on the 2018 consultant evaluation for the transition into either full scale biosolids composting or increased onsite biosolids storage. The 2019 budget funds to support engineering phases are predicated on the decisions from the prior year and those required at the time of engineering contract award. The Wastewater Sludge Storage Options CIP adheres to this anticipated timeline, which includes costs for construction in 2020.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Sewer Rate changes					
% per year	0%	0%	0%	0%	0%
Strategic Outcomes					
Wastewater treatment standards					
CMAR Grade for ten categories	A	A	A	A	A
Overall CMAR GPA	3.73	3.73	4.00	4.00	4.00
Work Process Outputs					
Project Management					
% of projects completed at year-end	36%	45%	100%	50%	100%

**CITY OF APPLETON 2019 BUDGET
WASTEWATER UTILITY**

Utility Capital Improvements

Business Unit 5432

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Expenses					
6404 Consulting Services	\$ 65,195	\$ 196,536	\$ 140,000	\$ 435,783	\$ 895,000
6408 Contractor Fees	441,129	191,656	920,000	3,562,766	3,026,000
6599 Other Contracts/Obligations	370	2,303	20,000	20,000	-
6801 Land	-	-	-	5,000	-
6802 Land Improvements	140,463	179,048	315,000	344,253	300,000
6803 Buildings	64,019	328,334	1,710,750	1,825,290	700,000
6804 Equipment	140,860	143,480	258,500	426,750	660,000
6809 Infrastructure Construction	-	-	-	-	-
6899 Other Capital Outlay	(769,595)	(717,615)	-	-	-
Total Expense	<u>\$ 82,441</u>	<u>\$ 323,742</u>	<u>\$ 3,364,250</u>	<u>\$ 6,619,842</u>	<u>\$ 5,581,000</u>

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

<u>Consulting Services</u>		<u>Land Improvements</u>	
Sludge storage options	\$ 750,000	Roadway replacement	\$ 300,000
Compressor replacement	30,000		<u>\$ 300,000</u>
Plant piping	90,000	<u>Equipment</u>	
Midway lift station	25,000	Compressor replacement	\$ 100,000
	<u>\$ 895,000</u>	RAS pump replacement	560,000
			<u>\$ 660,000</u>
<u>Buildings</u>			
Water lateral replacement	\$ 225,000		
Lighting upgrades	75,000		
Air handling units upgrades	400,000		
	<u>\$ 700,000</u>		
<u>Contractor Fees</u>			
Midway Lift Station	\$ 175,000		
Electrical distribution upgrade	1,800,000		
Plant piping	1,051,000		
	<u>\$ 3,026,000</u>		

**CITY OF APPLETON 2019 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 and the spot repair/protruding tap 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 project bidding schedule was delayed in 2017 so only a small amount was budgeted for spot repairs and protruding taps in 2018. The increase in contractor fees is a result of bringing spot repairs/protruding tap program back to a normal level of work and the root control program being done in 2019.

Per the Sanitary Lateral Policy, \$54,000 has been added to consulting services to continue the lateral televising in advance of replacing them in 2020 and/or 2021.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Benefit of inspection program					
# defects identified from TV report	34	34	22	22	25
Compliance with regulation					
# of protruding taps identified	9	6	5	3	5
# of cross connections identified	103	83	60	55	55
Strategic Outcomes					
Reliability of system maintenance program					
# of trouble calls	17	21	30	30	30
# of system blockages removed	1	0	4	3	3
% of total system televised	14.2%	13.1%	11.0%	11.0%	11.0%
Work Process Outputs					
Maintenance performed					
% of total system cleaned	49%	51%	48%	52%	50%
# of spot repairs made	0	28	23	21	22
Safeguarding health and safety					
# of protruding taps removed	0	5	5	4	5

**CITY OF APPLETON 2019 BUDGET
WASTEWATER UTILITY**

Collection Systems

Business Unit 5427

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Revenues					
4801 Charges for Serv. - Nontax	\$ 5,859	\$ 6,539	\$ 6,000	\$ 6,000	\$ 6,500
4908 Intergovernmental Charges	4,669	1,231	5,000	5,000	1,500
5035 Other Reimbursements	2,800	3,415	-	-	-
Total Revenue	\$ 13,328	\$ 11,185	\$ 11,000	\$ 11,000	\$ 8,000
Expenses					
6101 Regular Salaries	\$ 245,830	\$ 272,602	\$ 290,650	\$ 290,650	\$ 283,771
6104 Call Time	1,141	1,735	1,500	1,500	1,500
6105 Overtime	3,973	6,301	4,200	4,200	4,200
6108 Part-Time	973	57	-	-	337
6150 Fringes	91,107	111,738	108,421	108,421	113,510
6201 Training/Conferences	-	-	1,000	1,000	500
6203 Memberships & Licenses	175	-	-	-	-
6305 Awards & Recognition	245	244	245	245	245
6309 Shop Supplies & Tools	2,390	1,838	2,500	2,500	2,500
6325 Construction Materials	9,086	9,663	16,000	16,000	10,000
6327 Miscellaneous Equipment	5,042	4,754	4,750	4,750	4,700
6404 Consulting Services	244,927	165,501	164,000	178,765	208,500
6408 Contractor Fees	62,188	109,135	66,000	156,000	161,000
6413 Utilities	10,069	9,240	10,180	10,180	10,180
6415 Tipping Fees	4,964	3,755	4,000	4,000	4,000
6418 Equipment Repairs & Maint	-	1,062	1,100	1,100	800
6424 Software Support	2,357	1,247	2,150	2,150	2,350
6425 CEA Equip. Rental	46,064	45,469	70,470	70,470	70,470
6599 Other Contracts/Obligations	5,771	6,133	6,000	6,000	6,500
Total Expense	\$ 736,302	\$ 750,474	\$ 753,166	\$ 857,931	\$ 885,063

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

Consulting Services

Sewer TV & cleaning	\$ 150,000
Flow monitoring - Kensington	4,500
Lateral Televising	54,000
	<u>\$ 208,500</u>

Contractor Fees

Surface restoring -prior year repairs	\$ 25,000
Protruding Taps	35,000
Root Control	25,000
Spot repair liners	55,000
Unanticipated failures	20,000
Misc. Fees	1,000
	<u>\$ 161,000</u>

**CITY OF APPLETON 2019 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 2019 CIPs:

	<u>2019 Budget</u>	<u>Page</u>
Sanitary Sewer Construction	\$ <u>4,382,819</u>	Projects, Pg. 600

Major changes in Revenue, Expenditures or Programs:

No major changes.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Reduction of wastewater treatment cost					
# of manholes - rehab/rebuilt	34	54	25	25	25
Collection system rating from CMAR	A	A	A	A	A
# of laterals replaced	134	222	200	200	200
Strategic Outcomes					
Improvements to the sanitary sewer system					
Total miles of sanitary sewer	325	324*	324	324	324
% of total miles of sanitary sewer reconstructed	0.60%	0.58%	0.50%	0.57%	0.65%
Work Process Outputs					
Restoration of sanitary sewers					
Miles of existing sanitary sewer reconstruction	1.95	1.89	1.84	1.84	2.11
Expansion of sanitary sewer system					
Miles of new sanitary sewer added	1.04	0.06	0.69	0.69	1.00
Reduction of treatment costs					
# of seals installed	94	81	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 2019 BUDGET
WASTEWATER UTILITY**

Public Works Capital Improvements

Business Unit 5431

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Expenses					
6101 Regular Salaries	\$ 11,856	\$ (6,788)	\$ 112,855	\$ 112,855	\$ 116,541
6105 Overtime	5,937	4,295	4,143	4,143	4,125
6108 Part-Time	474	689	2,854	2,854	2,496
6150 Fringes	8,750	4,960	38,473	38,473	40,232
6325 Construction Materials	484	-	-	-	-
6404 Consulting Services	36,175	48,183	50,000	150,000	-
6408 Contractor Fees	-	35,334	-	-	-
6425 CEA Equip. Rental	-	-	7,400	7,400	7,400
6599 Other Contracts/Obligations	475	753	-	-	-
6809 Infrastructure Construction	1,483,486	2,741,600	2,019,826	2,073,339	4,212,025
6899 Other Capital Outlay	(1,161,411)	(2,219,662)	-	-	-
Total Expense	\$ 386,226	\$ 609,364	\$ 2,235,551	\$ 2,389,064	\$ 4,382,819

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

	Street	From	To	Waste-water Utility
Labor Pool				163,394
CEA				7,400
Miscellaneous Construction				
	Sanitary Laterals & Manholes Prior To 2019 Asphalt			66,270
	Sanitary Laterals & Manholes Prior To 2019 Concrete			32,550
	Structure Rehabilitation / Sewer Cut repairs from 2018			40,000
	Subtotal			138,820
New Construction				
	Edgewood Dr	Lightning Dr	French Rd	548,000
	Apple Ridge Liftstation & Forcemain			230,880
	North Edgewood Estates Liftstation & Forcemain			643,500
	Sommers Dr	Spartan Ave, 100' s to 400' n		87,500
	Spartan Ave	Haymeadow Ave	Meade St	124,400
	Subtotal			1,634,280
Reconstruction - liner				
	Fremont St	East St	Harmon St	13,500
	Fremont St	Kernan Ave, 666' w to 334' w		30,590
	Vulcan St	South Island St to 307' n		48,230
	Subtotal			92,320
Reconstruction (on streets to be paved in 2020)				
	Carpenter St	Calumet St	Taft Ave	341,500
	Carpenter St	Fremont St	Calumet St	334,900
	Erb St	Michigan St to 130' n		20,625
	Harriet St	Waller Ave	Telulah Ave	77,575
	Henry St	Werner St	Telulah Ave	90,025
	Morrison St	Hancock St	Wisconsin Ave	76,600
	Opechee St	Leminwah St	w/o	46,350
	Opechee St	Leminwah St	Owaissa St	6,250
	Prospect Ave	Bartell Dr	Haskell St	388,455
	Prospect Ave	Seminole Dr	Bartell Dr	220,950
	Randall St	Oneida St	Meade St	507,525
	Warner St	College Ave	Henry St	36,250
	Winnebago St	Division St	Drew St	189,600
	Subtotal			2,346,605
Total				\$ 4,382,819

Description	2016 Actual	2017 Actual	2018 YTD Actual	2018 Adopted Budget	2018 Amended Budget	2019 Requested Budget	2019 Adopted Budget
REVENUES							
Interest Income	157,142	174,762	86,124	260,000	260,000	107,500	107,500
Charges for Services	9,038,994	9,040,741	4,825,185	8,945,000	8,945,000	8,930,000	8,930,000
Intergov. Charges for Service	4,670	1,231	717	5,000	5,000	1,500	1,500
Other Revenues	2,804,793	3,585,823	2,674,108	2,324,806	2,324,806	2,366,000	2,516,924
TOTAL REVENUES	12,005,599	12,802,557	7,586,134	11,534,806	11,534,806	11,405,000	11,555,924
EXPENSES BY LINE ITEM							
Regular Salaries	371,832	373,102	283,934	444,174	444,174	339,490	455,526
Labor Pool Allocations	1,046,972	1,071,805	801,634	1,327,157	1,327,157	1,372,253	1,372,253
Call Time	5,155	5,463	4,290	7,106	7,106	6,700	6,700
Overtime	74,580	76,943	70,185	89,960	89,960	93,963	93,963
Part-Time	11,422	10,894	11,993	14,614	14,614	14,636	14,636
Other Compensation	6,830	7,303	7,022	8,155	8,155	8,239	8,239
Shift Differential	2,160	2,158	718	2,425	2,425	0	0
Sick Pay	9,581	22,123	13,763	0	0	0	0
Vacation Pay	157,513	153,871	123,746	0	0	0	0
Fringes	619,098	689,101	474,242	701,192	701,192	699,354	741,480
Unemployment Compensation	136	0	0	0	0	0	0
Pension Expense / Revenue	207,408	198,635	0	0	0	0	0
Salaries & Fringe Benefits	2,512,687	2,611,398	1,791,527	2,594,783	2,594,783	2,534,635	2,692,797
Training & Conferences	9,000	10,043	4,906	8,500	8,500	12,500	12,500
Office Supplies	2,773	2,159	4,692	3,000	3,000	3,000	3,000
Subscriptions	267	74	0	100	100	100	100
Memberships & Licenses	2,314	6,635	5,856	7,040	7,040	7,965	7,965
Postage & Freight	18,817	20,895	11,891	26,500	26,500	28,500	25,500
Awards & Recognition	595	463	227	545	545	545	545
Building Maintenance/Janitor.	5,929	5,510	6,224	6,500	6,500	10,380	10,380
Food & Provisions	400	477	362	400	400	400	400
Insurance	137,808	265,979	199,359	265,812	265,812	130,790	130,790
Depreciation Expense	2,928,395	2,872,797	2,205,000	3,200,000	3,200,000	0	3,200,000
Uncollectible Accounts	2,165	2,271	626	4,500	4,500	4,000	4,000
Meter Expense	514,361	598,201	0	630,000	630,000	0	672,960
Interest Payments	541,150	488,144	395,784	522,325	522,325	488,869	494,275
Debt Issuance Costs	0	0	0	0	0	0	100,000
Trans Out - General Fund	117,450	117,450	88,088	117,450	117,450	117,450	117,450
Administrative Expense	4,281,424	4,391,098	2,923,015	4,792,672	4,792,672	804,499	4,779,865
Shop Supplies & Tools	34,774	46,522	33,059	30,500	30,500	42,500	42,500
Chemicals	230,936	350,157	190,367	335,000	335,000	422,000	422,000
Miscellaneous Supplies	0	4,137	145	1,000	1,000	1,000	1,000
Printing & Reproduction	5,237	7,267	6,598	6,300	6,300	8,000	8,000
Clothing	5,330	4,722	3,403	5,500	5,500	5,500	5,500
Gas Purchases	8,359	7,787	3,834	8,400	8,400	8,400	8,400
Safety Supplies	6,990	8,074	3,511	5,500	5,500	5,500	5,500
Medical & Lab Supplies	20,239	19,568	10,524	21,000	21,000	21,000	21,000
Construction Materials	9,569	9,663	1,851	16,000	16,000	10,000	10,000
Vehicle & Equipment Parts	0	11,778	77,587	110,000	110,000	110,000	110,000
Miscellaneous Equipment	74,974	46,711	19,307	45,350	45,350	96,900	96,900
Supplies & Materials	396,408	516,386	350,186	584,550	584,550	730,800	730,800
Accounting/Audit	11,140	9,579	0	9,360	9,360	10,000	20,000
Legal Fees	26,729	27,077	29,199	29,250	29,250	28,850	28,850
Bank Services	20,170	19,484	9,479	21,500	21,500	21,500	21,500
Consulting Services	364,681	439,936	430,386	397,000	953,748	1,116,000	1,146,000
Collection Services	2,965	5,504	2,436	3,750	3,750	164,500	164,500
Contractor Fees	1,108,377	769,618	746,410	1,650,500	4,453,415	3,604,250	3,654,250
Temporary Help	0	434	0	0	0	0	0
Advertising	56	0	143	1,500	1,500	1,500	1,500
Tipping Fees	7,725	6,257	5,290	7,500	7,500	7,500	7,500
Lab Fees	1,139	12,362	9,737	25,050	25,050	25,750	25,750
Billing Services	61,721	62,834	50,502	69,000	69,000	67,000	67,000

City of Appleton
2019 Budget
Revenue and Expense Summary

Description	2016 Actual	2017 Actual	2018 YTD Actual	2018 Adopted Budget	2018 Amended Budget	2019 Requested Budget	2019 Adopted Budget
Snow Removal Services	2,950	2,964	4,493	3,500	3,500	3,500	3,500
Other Contracts/Obligations	52,104	35,946	24,694	79,975	79,975	60,475	60,475
Purchased Services	1,659,757	1,391,995	1,312,769	2,297,885	5,657,548	5,110,825	5,200,825
Electric	853,736	844,772	647,144	878,450	878,450	856,450	856,450
Gas	72,268	117,992	117,618	91,200	91,200	141,200	141,200
Water	67,993	62,276	46,545	71,000	71,000	70,750	70,750
Stormwater	32,679	24,360	18,826	32,565	32,565	25,358	25,358
Telephone	10,858	11,307	8,147	11,400	11,400	11,400	11,400
Cellular Telephone	4,455	4,467	3,126	5,200	5,200	5,740	5,740
Utilities	1,041,989	1,065,174	841,406	1,089,815	1,089,815	1,110,898	1,110,898
Building Repair & Maintenance	0	129	29,918	35,000	35,000	35,000	35,000
Vehicle Repair & Maintenance	0	0	0	10,000	10,000	0	0
Equipment Repair & Maintenance	218,798	134,463	80,128	42,600	42,600	183,100	198,100
Facilities Charges	379,064	416,362	290,709	446,045	446,045	453,890	453,890
Software Support	15,334	10,549	14,899	16,450	16,450	16,650	16,650
CEA Equipment Rental	84,741	84,435	71,396	119,500	119,500	121,520	121,520
Grounds Repair & Maintenance	5,286	11,810	3,669	7,500	7,500	7,500	7,500
Repair & Maintenance	703,223	657,748	490,719	677,095	677,095	817,660	832,660
Land	0	0	0	0	5,000	0	0
Land Improvements	140,463	179,048	8,900	315,000	344,253	300,000	300,000
Buildings	64,019	328,334	0	1,710,750	1,825,290	700,000	700,000
Machinery & Equipment	140,860	143,480	16,131	258,500	426,750	320,000	660,000
Infrastructure Construction	1,483,486	2,741,600	923,833	2,019,826	2,073,339	4,212,025	4,212,025
Other Capital Outlay	1,958,831	2,983,387	0	0	0	0	0
Capital Expenditures	130,003	409,075	948,864	4,304,076	4,674,632	5,532,025	5,872,025
TOTAL EXPENSES	10,465,485	11,042,874	8,658,486	16,340,876	20,071,095	16,641,342	21,219,870

CITY OF APPLETON 2019 BUDGET
WASTEWATER UTILITY
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS

	2016 Actual	2017 Actual	2018 Budget	2018 Projected	2019 Budget
Revenues					
Charges for Services	\$ 9,358,103	\$ 9,367,786	\$ 9,275,000	\$ 9,265,000	\$ 9,265,000
Miscellaneous	2,236,580	2,776,401	1,826,000	3,572,500	2,076,000
Total Revenues	<u>11,594,683</u>	<u>12,144,187</u>	<u>11,101,000</u>	<u>12,837,500</u>	<u>11,341,000</u>
Expenses					
Operation and Maintenance	6,807,640	7,494,136	6,901,300	7,222,414	7,344,326
Depreciation	2,928,395	2,872,797	3,200,000	3,000,000	3,200,000
Total Expenses	<u>9,736,035</u>	<u>10,366,933</u>	<u>10,101,300</u>	<u>10,222,414</u>	<u>10,544,326</u>
Operating Income (Loss)	1,858,648	1,777,254	999,700	2,615,086	796,674
Non-Operating Revenues (Expenses)					
Interest Income	157,142	174,762	260,000	100,000	107,500
Interest Expense	(541,150)	(488,144)	(522,325)	(522,325)	(494,275)
Debt Issuance Costs	-	-	-	(75,000)	(100,000)
Gain/Loss on Asset Disposal	(57,030)	-	-	-	-
Amortization of Premium on Debt Issue	18,773	18,053	17,256	17,256	16,399
Total Non-Operating	<u>(422,265)</u>	<u>(295,329)</u>	<u>(245,069)</u>	<u>(480,069)</u>	<u>(470,376)</u>
Net Income Before Contributions and Transfers	1,436,383	1,481,925	754,631	2,135,017	326,298
Contributions and Transfers In (Out)					
Capital Contributions	292,031	465,556	156,550	-	91,025
Trans Out - Capital Projects	(70,850)	-	-	-	-
Trans Out - Stormwater	-	-	-	-	-
Trans Out - General Fund	<u>(117,450)</u>	<u>(187,795)</u>	<u>(117,450)</u>	<u>(117,450)</u>	<u>(117,450)</u>
Change in Net Assets	1,540,114	1,759,686	793,731	2,017,567	299,873
Net Assets - Beginning	<u>94,399,001</u>	<u>95,939,115</u>	<u>97,698,801</u>	<u>97,698,801</u>	<u>99,716,368</u>
Net Assets - Ending	<u>\$ 95,939,115</u>	<u>\$ 97,698,801</u>	<u>\$ 98,492,532</u>	<u>\$ 99,716,368</u>	<u>#####</u>

SCHEDULE OF CASH FLOWS

Working Cash - Beginning of Year	18,546,334	14,532,849
+ Change in Net Assets	2,017,567	299,873
+ Depreciation	3,000,000	3,200,000
+ Long Term Debt*	-	4,000,000
- Contributed Capital	-	(91,025)
- Fixed Assets	(8,141,052)	(9,963,819)
- Principal Repayment*	(890,000)	(890,000)
+ Fixed Assets funded by DNR Replacement Fund	-	560,000
Working Cash - End of Year	<u>\$ 14,532,849</u>	<u>\$ 11,647,878</u>

RESERVE REQUIREMENTS

<u>Working Capital</u>		<u>DNR Fund</u>	
Prior Year Audited Expenditures	\$ 10,366,933	Fixed Asset Balance 12/31/17	\$ 20,215,099
- Depreciation	(2,872,797)	10% Requirement	<u>\$ 2,021,510</u>
+ Transfer to General Fund	187,795		
Net Prior Year Cash Expenditures	<u>\$ 7,681,931</u>	DNR Fund Balance 12/31/18	\$ 3,625,582
25 % Working Capital Reserve Requirement	<u>\$ 1,920,483</u>	DNR Funded CIP projects	(560,000)
		DNR Fund Balance 12/31/19	<u>\$ 3,065,582</u>

* Net of 2018 Revenue Refunding Bond Issue

**CITY OF APPLETON 2019 BUDGET
WASTEWATER UTILITY
CALCULATION OF RATE INCREASE DOCUMENTATION**

	2018 Budget	2018 Projected	2019 Budget	2020 Projected	2021 Projected	2022 Projected	2023 Projected
Revenues							
Charges for Services	\$ 9,275,000	\$ 9,265,000	\$ 9,265,000	\$ 9,913,550	\$ 10,607,499	\$ 10,634,017	\$ 10,660,602
Miscellaneous	1,826,000	3,572,500	2,076,000	2,096,760	2,117,728	2,138,905	2,160,294
Total Revenues	11,101,000	12,837,500	11,341,000	12,010,310	12,725,226	12,772,922	12,820,896
Expenses							
Operating Expenses	6,901,300	7,222,414	7,344,326	7,664,656	7,894,595	8,131,433	8,375,376
Depreciation	3,200,000	3,000,000	3,200,000	3,375,000	3,625,000	3,760,000	3,895,000
Total Expenses	10,101,300	10,222,414	10,544,326	11,039,656	11,519,595	11,891,433	12,270,376
Operating Income	999,700	2,615,086	796,674	970,654	1,205,631	881,489	550,520
Non-Operating Revenues (Expenses)							
Interest Income	260,000	100,000	107,500	150,000	150,000	150,000	150,000
Interest Expense	(522,325)	(522,325)	(494,275)	(671,596)	(977,863)	(1,081,679)	(1,182,571)
Premium on Debt Issue	17,256	17,256	16,399	15,431	14,321	13,124	11,859
Debt Issue Costs	-	(75,000)	(100,000)	(200,000)	(100,000)	(100,000)	(100,000)
Total Non-Operating	(245,069)	(480,069)	(470,376)	(706,165)	(913,542)	(1,018,555)	(1,120,712)
Net Income Before Transfers	754,631	2,135,017	326,298	264,489	292,089	(137,066)	(570,192)
Contributions and Transfers in (Out)							
Capital Contributions	156,550	-	91,025	-	-	-	-
Trans Out - Internal Service	-	-	-	-	-	-	-
General Fund	(117,450)	(117,450)	(117,450)	(117,450)	(117,450)	(117,450)	(117,450)
Change in Net Assets	793,731	2,017,567	299,873	147,039	174,639	(254,516)	(687,642)
Total Net Assets - Beginning	97,698,801	97,698,801	99,716,368	100,016,241	100,163,280	100,337,919	100,083,403
Total Net Assets - Ending	\$98,492,532	\$99,716,368	\$100,016,241	\$100,163,280	\$100,337,919	\$100,083,403	\$99,395,761

SCHEDULE OF CASH FLOWS

Cash - Beginning of the Year	18,546,334	14,532,849	11,647,878	7,606,037	7,479,929	7,251,856	
+ Change in Net Assets	2,017,567	299,873	147,039	174,639	(254,516)	(687,642)	
+ Depreciation	3,000,000	3,200,000	3,375,000	3,625,000	3,760,000	3,895,000	
+ Long Term Debt	-	4,000,000	10,000,000	4,000,000	3,500,000	5,000,000	
- Contributed Capital	-	(91,025)	-	-	-	-	
- Fixed Assets	(8,141,052)	(9,963,819)	(16,628,880)	(6,895,747)	(5,933,557)	(8,551,345)	
- Principal Repayment	(890,000)	(890,000)	(935,000)	(1,030,000)	(1,300,000)	(1,465,000)	
+ Fixed Assets funded by DNR Rplcmnt Fund	-	560,000	-	-	-	-	
Working Cash - End of Year	\$14,532,849	\$11,647,878	\$7,606,037	\$7,479,929	\$7,251,856	\$5,442,869	
25% Working Capital Reserve (prior year's audited expenses)		1,965,547	1,989,013	2,113,425	2,247,477	2,332,641	
Coverage Ratio		4.11	2.96	2.61	2.38	1.93	1.66

ASSUMPTIONS:

Borrow 60% of capital expenditures as detailed in plan after 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 2019
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 14% rate increase is projected for 7/1/2020 to provide cash flow needed and to cover operating expense and to meet the debt coverage ratio to issue debt for capital improvement projects. The current rates were effective 7/1/2011.

**CITY OF APPLETON 2019 BUDGET
WASTEWATER UTILITY
LONG TERM DEBT - REVENUE BONDS**

	2010 Revenue Bonds		2011 Revenue Bonds		2018 Refunding Revenue Bonds	
	Principal	Interest	Principal	Interest	Principal	Interest
2019	\$ 245,000	\$ 130,800	\$ 165,000	\$ 108,600	480,000	\$ 214,875
2020	250,000	123,350	175,000	102,283	510,000	185,963
2021	260,000	114,783	180,000	95,150	530,000	170,330
2022	270,000	105,450	190,000	87,683	545,000	147,746
2023	280,000	95,300	195,000	79,950	575,000	128,121
2024	290,000	84,067	205,000	71,883	595,000	103,017
2025	300,000	72,200	210,000	63,550	620,000	72,433
2026	315,000	59,800	220,000	54,883	650,000	40,433
2027	325,000	46,933	230,000	45,817	450,000	17,600
2028	340,000	33,533	240,000	36,350	290,000	3,867
2029	355,000	19,533	250,000	26,483	-	-
2030	370,000	4,933	260,000	16,217	-	-
2031	-	-	300,000	4,250	-	-
	<u>\$ 3,600,000</u>	<u>\$ 890,682</u>	<u>\$ 2,820,000</u>	<u>\$ 793,099</u>	<u>\$ 5,245,000</u>	<u>\$ 1,084,385</u>

	TOTAL		
	Principal	Interest	Total
2019	\$ 890,000	\$ 454,275	\$ 1,344,275
2020	935,000	411,596	1,346,596
2021	970,000	380,263	1,350,263
2022	1,005,000	340,879	1,345,879
2023	1,050,000	303,371	1,353,371
2024	1,090,000	258,967	1,348,967
2025	1,130,000	208,183	1,338,183
2026	1,185,000	155,116	1,340,116
2027	1,005,000	110,350	1,115,350
2028	870,000	73,750	943,750
2029	605,000	46,016	651,016
2030	630,000	21,150	651,150
2031	300,000	4,250	304,250
	<u>\$ 11,665,000</u>	<u>\$ 2,768,166</u>	<u>\$ 14,433,166</u>

Note: Schedule is based on accrual method of accounting. Revenue bonds in the amount of \$4,000,000 will be issued in 2019. Expected interest expense of the issue in 2019 is \$40,000.

CITY OF APPLETON 2019 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 2019 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 2018 EVENTS

- Completed GIS updated measurement for commercial stormwater utility accounts
- 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
- Continued 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 42 wet ponds, 12 dry ponds, 8 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 construct new STH 441 detention basin to improve flood reduction and runoff quality
- Completed plans, acquired permits, applied for grants, and let bids for construction of 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
- Administered installation of native vegetation for Facilities & Construction Management at the new Cotter Street Pond and Lightning/JJ Pond
- Constructed storm sewer and stormwater treatment facilities for urbanization of Alvin Street and Evergreen Drive east of Richmond Street

CITY OF APPLETON 2019 BUDGET STORMWATER

MAJOR 2019 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

Construct the Leona Street Pond Project to reduce flooding in the vicinity of Ballard Road and provide water quality benefits

Construct Spartan Drive storm sewer and stream crossing from 1,000 feet east of STH 47 to 900 feet east of Haymeadow Avenue

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

Implement rate increase of 13% from \$155 to \$175 per ERU on January 1, 2019. This is part of the rate plan that was approved by Council on June 15, 2011. That plan included a rate increase no higher than 18% in 2016. The 2016 rate increase was postponed until 2019, but is now needed to support increased expenses and to maintain debt coverage ratio. The current rate has been in place since June 2011

DEPARTMENT BUDGET SUMMARY							
Programs		Actual		Budget			% Change *
Unit	Title	2016	2017	Adopted 2018	Amended 2018	2019	
Program Revenues		\$ 10,109,539	\$ 10,936,016	\$ 10,248,990	\$ 10,248,990	\$ 12,043,268	17.51%
Program Expenses							
5210	Administration	5,459,129	5,200,362	5,790,432	5,801,382	5,878,994	1.53%
5220	Facility Maintenance	1,287,949	1,316,085	1,375,789	1,437,723	1,562,606	13.58%
5225	Leaf Collection	436,899	493,327	445,172	445,172	494,754	11.14%
5230	Capital Construction	482,214	900,349	6,099,124	8,357,317	6,115,486	0.27%
TOTAL		\$ 7,666,191	\$ 7,910,123	\$ 13,710,517	\$ 16,041,594	\$ 14,051,840	2.49%
Expenses Comprised Of:							
Personnel		1,586,771	1,589,654	1,767,897	1,767,897	1,831,283	3.59%
Administrative Expense		4,507,679	4,445,438	5,002,224	5,002,224	4,923,573	-1.57%
Supplies & Materials		95,193	73,095	93,420	93,420	103,660	10.96%
Purchased Services		1,293,383	1,161,677	625,820	1,571,587	1,298,150	107.43%
Utilities		3,033	5,381	6,414	6,414	6,604	2.96%
Repair & Maintenance		446,010	491,311	508,606	508,606	568,415	11.76%
Capital Expenditures		(265,878)	143,567	5,706,136	7,091,446	5,320,155	-6.76%
Full Time Equivalent Staff:							
Personnel allocated to programs		19.69	19.69	19.76	19.76	19.76	

* % change from prior year adopted budget

**CITY OF APPLETON 2019 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:

The revenue budget reflects a 13% rate increase effective 1/1/2019. Council approved a rate increase plan on June 15, 2011, that approved a rate increase of no higher than 18% in 2016. This 2016 rate increase was postponed until 2019 until it was needed to support increased expenses and to maintain debt coverage ratio.

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 Stormwater budget was reduced in 2018 to postpone the need to increase rates. The increase in consulting services in 2019 is due to bringing that account back up to normal workload and includes several study areas that were postponed. Software support was reduced in 2018 when the permit tracker was not used and data was tracked manually, the use of permit tracker will resume in 2019.

The budget increase in Other Contracts/Obligations is due to concrete and sidewalk special assessments for Purdy Parkway.

A Wisconsin DNR grant was approved for Leona Ponds and accounts for the \$150,000 in Miscellaneous State Aid.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Economic development					
Drainage Studies/Plans completed or updated	0	2*	0	0	3
Strategic Outcomes					
Alternative sources of revenue					
# of grants applied for	1	0	2***	2***	0
Value of grant dollars awarded or applied for future reimbursement	\$349,790*	\$ -	\$ -	\$ 150,000	\$ -
Safe, reliable future level of service					
Acre feet of storage identified for future use	0.8	0.00	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	48	30	40	40

* Northland Pond

*** Leona Pond (NPS & MFC)

**CITY OF APPLETON 2019 BUDGET
STORMWATER**

Administration

Business Unit 5210

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Revenues					
4224 Miscellaneous State Aids	\$ -	\$ -	\$ -	\$ -	\$ 150,000
4411 Sundry Permits	25	425	-	-	25
4418 Plan Review Permit	41,034	33,973	35,000	35,000	35,000
4420 Erosion Control	6,450	7,630	7,000	7,000	7,500
4710 Interest on Investments	83,128	144,434	200,000	200,000	125,000
4730 Interest - Deferred Special	1,791	1,125	-	-	-
4880 Stormwater Revenue	9,339,293	9,428,127	9,415,000	9,415,000	10,800,000
5021 Capital Contributions	415,683	784,603	161,555	161,555	462,725
5035 Other Reimbursements	7,649	20,476	-	-	20,000
5071 Customer Penalty	34,329	33,913	35,000	35,000	35,000
5086 Premium on Debt Issue	176,209	405,852	395,435	395,435	406,818
Total Revenue	\$ 10,105,591	\$ 10,860,558	\$ 10,248,990	\$ 10,248,990	\$ 12,042,068
Expenses					
6101 Regular Salaries	\$ 423,735	\$ 393,024	\$ 439,954	\$ 439,954	\$ 446,619
6104 Call Time	302	368	600	600	600
6105 Overtime	755	2,054	1,000	1,000	1,000
6108 Part-Time	424	11	-	-	337
6150 Fringes	224,232	246,198	162,365	162,365	168,581
6201 Training\Conferences	2,637	3,479	7,500	7,500	7,500
6206 Parking Permits	684	720	720	720	720
6301 Office Supplies	294	153	250	250	250
6303 Memberships & Licenses	13,100	14,415	15,015	15,015	15,020
6304 Postage\Freight	18,264	20,053	22,000	22,000	23,000
6305 Awards & Recognition	665	665	665	665	665
6309 Shop Supplies & Tools	138	243	-	-	200
6315 Books & Library Materials	-	-	100	100	100
6320 Printing & Reproduction	2,817	3,630	3,300	3,300	3,600
6321 Clothing	161	145	150	150	150
6323 Safety Supplies	352	884	350	350	350
6327 Miscellaneous Equipment	2,964	600	2,200	2,200	2,200
6401 Accounting\Audit	9,654	8,831	9,900	9,900	9,000
6402 Legal Fees	510	330	400	400	400
6403 Bank Services	16,653	16,097	18,120	18,120	18,120
6404 Consulting Services	175,494	112,371	178,800	189,750	306,000
6413 Utilities	849	977	1,104	1,104	1,104
6418 Equipment Repair & Maint	-	139	-	-	-
6424 Software Support	12,930	11,631	5,975	5,975	16,300
6425 CEA Equip. Rental	7,604	6,031	10,600	10,600	10,600
6430 Health Services	-	20	-	-	-
6501 Insurance	39,936	47,005	42,730	42,730	44,260
6599 Other Contracts/Obligations	127,586	10,860	8,500	8,500	25,370
6601 Depreciation Expense	2,473,940	2,553,534	2,825,000	2,825,000	2,800,000
6623 Uncollectable Accounts	1,346	1,806	1,400	1,400	1,900
6720 Interest Payments	1,641,736	1,522,892	1,722,007	1,722,007	1,732,532
6730 Debt Issuance Costs	198,317	76,889	150,000	150,000	90,000
6751 Gain/Loss on refund Amort	48,550	136,117	147,227	147,227	140,016
6899 Other Capital Outlay	-	(4,310)	-	-	-
7911 Trans Out - General Fund	12,500	12,500	12,500	12,500	12,500
Total Expense	\$ 5,459,129	\$ 5,200,362	\$ 5,790,432	\$ 5,801,382	\$ 5,878,994

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

Memberships & Licenses		Consulting Services	
IECA Membership	\$ 250	Stormwater Mgmt plan review	\$ 75,000
NR216 Annual Fee	8,000	Flooding concerns study	40,000
NEWSC Dues	3,300	NR216 permitting	33,000
MEG Membership	2,000	Wetland studies	11,000
ASCIS Membership	520	Water quality modeling	32,000
League of Municipalities SW	600	K2 Drainage basins	30,000
APWA Membership	350	Valley Rd Urbanization	
	<u>\$ 15,020</u>	Modeling	30,000
Other Contracts/Obligations		Kensington Newberry Study	25,000
Special Assessments Ponds	\$ 16,870	French Road Study	30,000
Digger's Hotline	6,000		<u>\$ 306,000</u>
Fox Wolf Watershed Alliance - sponsorship river cleanup	2,500	Software Support	
	<u>\$ 25,370</u>	Permit tracker	\$ 10,000
Postage\Freight		XP-SWMM Software	3,500
City Service Invoice postage	\$ 21,500	Data storage & support GPS	1,800
City Service Invoice folding/inserting	1,500	IRTH Solutions & Eagle Point	1,000
	<u>\$ 23,000</u>		<u>\$ 16,300</u>

**CITY OF APPLETON 2019 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 stormwater budget was reduced in 2018 to postpone the need to increase rates. The increase in construction material, consulting services and contractor fees is due to bringing those accounts back up to normal workload.

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Benefit of inspection program					
# of spot repairs identified from TV reports	21	21	18	20	18
Compliance with regulation					
# of protruding taps identified	15	15	13	9	10
# of cross connections identified	0	0	0	0	0
Strategic Outcomes					
Effectiveness of maintenance program					
# of trouble calls	28	54	15	15	15
% of total system televised	10%	9%	9%	9%	10%
Work Process Outputs					
Preventive maintenance					
Cubic yards of material collected from street sweeping operations	4,059	5,570	4,000	4,000	4,000
% of total storm sewer system cleaned	11.1%	9.6%	13.0%	13.0%	12.0%
Safeguarding health and safety					
# of protruding taps removed	0**	10	10	8	10
# of spot repairs made	0**	16	15	13	15

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

**CITY OF APPLETON 2019 BUDGET
STORMWATER**

Facility Maintenance

Business Unit 5220

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Revenues					
4801 Charges for Serv.- Nontax	\$ 3,948	\$ 1,319	\$ -	\$ -	\$ 1,200
Total Revenue	<u>\$ 3,948</u>	<u>\$ 1,319</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 1,200</u>
Expenses					
6101 Regular Salaries	\$ 414,241	\$ 392,914	\$ 457,911	\$ 457,911	\$ 468,494
6104 Call Time	1,567	1,387	1,600	1,600	1,700
6105 Overtime	15,974	7,658	9,800	9,800	9,800
6108 Part-Time	4,998	6,791	11,748	11,748	13,092
6150 Fringes	178,081	193,102	194,143	194,143	206,129
6308 Landscape Supplies	10,845	946	6,360	6,360	3,860
6309 Shop Supplies & Tools	607	2,054	2,250	2,250	2,750
6316 Miscellaneous Supplies	-	90	-	-	-
6325 Construction Materials	71,632	55,962	71,510	71,510	83,250
6327 Miscellaneous Equipment	5,259	8,090	7,200	7,200	7,200
6404 Consulting Services	236,013	229,524	181,500	192,434	247,960
6408 Contractor Fees	34,305	61,735	48,600	99,600	110,900
6413 Utilities	1,804	4,377	4,810	4,810	5,000
6415 Tipping Fees	31,176	46,335	50,000	50,000	50,400
6418 Equipment Repair & Maint	-	1,063	1,100	1,100	1,100
6420 Facilities Charges	-	-	2,406	2,406	-
6424 Software Support	64	500	-	-	500
6425 CEA Equip. Rental	222,750	242,943	267,641	267,641	293,261
6454 Grounds Repair & Maint.	2,923	5,404	2,000	2,000	2,000
6503 Rent	55,710	55,210	55,210	55,210	55,210
Total Expense	<u>\$ 1,287,949</u>	<u>\$ 1,316,085</u>	<u>\$ 1,375,789</u>	<u>\$ 1,437,723</u>	<u>\$ 1,562,606</u>

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

Consulting Services

Ecology services for prairie & wetlands	\$ 115,460
Stormsewer TV & cleaning	97,500
Ecology services for ditches & ravines	35,000
	<u>\$ 247,960</u>

Contractor Fees

Surface restoration	\$ 30,000
Spot repairs	51,000
Animal control	8,500
Ditches & ravine repairs	8,000
Emergency Repairs	5,700
Non-native mowing	7,700
	<u>\$ 110,900</u>

Tipping Fees

Disposal costs of cleaning: \$35 per ton	
Streets - 1,020 tons	\$ 35,700
Storm sewers - 280 tons	9,800
Concrete	4,900
	<u>\$ 50,400</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	\$ 32,500
Concrete	30,000
Gravel	1,000
Piping	1,500
Clear Stone	500
Other materials	17,750
	<u>\$ 83,250</u>

**CITY OF APPLETON 2019 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 2019. The cost per cubic yard collected is based more on the condition of leaves collected rather than the number of cycles (wet soggy vs. dry fluffy).

PERFORMANCE INDICATORS

	<u>Actual 2016</u>	<u>Actual 2017</u>	<u>Target 2018</u>	<u>Projected 2018</u>	<u>Target 2019</u>
Client Benefits/Impacts					
Service provided					
Number of collection cycles	4	5	3	3	3
Strategic Outcomes					
Cost effective service provided					
Cost/cubic yard collected	\$ 11.36	\$ 12.99	\$ 12.00	\$ 12.00	\$ 12.00
Work Process Outputs					
Safer streets and cleaner storm water system					
Cubic yards of leaves collected	38,440	27,360	35,000	35,000	35,000

**CITY OF APPLETON 2019 BUDGET
STORMWATER**

Leaf Collection

Business Unit 5225

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Expenses					
6101 Regular Salaries	\$ 154,821	\$ 180,040	\$ 172,294	\$ 172,294	\$ 182,516
6104 Call Time	81	39	100	100	100
6105 Overtime	14,222	4,545	10,000	10,000	10,000
6108 Part-Time	-	-	-	-	-
6150 Fringes	69,566	85,044	54,384	54,384	66,984
6325 Construction Materials	-	32	-	-	-
6408 Contractor Fees	100	-	-	-	-
6413 Utilities	380	27	500	500	500
6425 CEA Equip. Rental	197,729	223,600	207,894	207,894	234,654
Total Expense	\$ 436,899	\$ 493,327	\$ 445,172	\$ 445,172	\$ 494,754

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

None

CITY OF APPLETON 2019 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 Spartan Drive box culvert and flood storage, to help meet flood reduction and water quality goals.

Please see the Stormwater 5-year capital improvement plan on page 588 for further details.

PERFORMANCE INDICATORS

	Actual 2016	Actual 2017	Target 2018	Projected 2018	Target 2019
Client Benefits/Impacts					
Solutions to system discrepancies					
Residential mini-sewer/drainage complaints: *					
Solved	63	44	100	100	90
Outstanding	52	41	95	95	45
Strategic Outcomes					
Improvements to the stormwater system					
Total miles of storm sewer in City	286	290	289	289	290
% of total miles reconstructed	0.49%	0.47%	0.61%	0.61%	1.50%
Acres of new land available	0	0	0	0	0
Integrity and growth of the system					
ACRE-FT of storage developed	0.0	5.7***	2**	2**	20.2****
Work Process Outputs					
Restoration of storm sewers					
Miles of storm sewer reconstructed	1.42	0.79	1.75	1.75	4.35
Expansion of storm sewer system					
Miles of new storm sewer added	0.58	2.30	1.54	1.54	0.65

* 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

****Leona Pond

***Cotter Pond, JJ/Lightning Pond

**CITY OF APPLETON 2019 BUDGET
STORMWATER**

Capital Construction

Business Unit 5230

PROGRAM BUDGET SUMMARY

Description	Actual		Budget		
	2016	2017	Adopted 2018	Amended 2018	2019
Revenues					
4908 Misc. Intergovernmental Charges	\$ -	\$ 9,300	\$ -	\$ -	\$ -
5035 Other Reimbursements	-	64,839	-	-	-
Total Revenue	\$ -	\$ 74,139	\$ -	\$ -	\$ -
Expenses					
6101 Regular Salaries	\$ 53,697	\$ 33,145	\$ 169,024	\$ 169,024	\$ 175,282
6104 Call Time	-	45	-	-	-
6105 Overtime	4,501	11,150	4,143	4,143	4,125
6108 Part-Time	924	3,620	2,854	2,854	2,496
6150 Fringes	24,651	28,520	75,977	75,977	73,428
6308 Landscape Supplies	-	-	-	-	-
6325 Construction Materials	417	419	-	-	-
6404 Consulting Services	203,678	315,008	130,000	625,250	530,000
6408 Contractor Fees	-	2,134	-	-	-
6414 Advertising	92	-	-	-	-
6415 Tipping Fees	-	356,389	-	377,633	-
6425 CEA Equip. Rental	(3)	-	10,990	10,990	10,000
6454 Grounds Repair & Maintenance	2,013	2,042	-	-	-
6599 Other Contracts / Obligations	435,649	-	-	-	-
6801 Land	80,020	652,560	430,000	467,000	235,000
6809 Infrastructure Construction	2,441,123	7,821,893	5,276,136	6,624,446	5,085,155
6899 Other Capital Outlay	(2,764,548)	(8,326,576)	-	-	-
Total Expense	\$ 482,214	\$ 900,949	\$ 6,099,124	\$ 8,357,917	\$ 6,115,486

DETAILED SUMMARY OF 2019 PROPOSED EXPENDITURES > \$15,000

2019	To	From	To	Storm-water Utility
Labor Pool				255,331
CEA				10,000
Consulting Services				100,000
				10,000
				10,000
				20,000
				100,000
				100,000
				130,000
				60,000
				530,000
Land Acquisition				235,000
				235,000
Miscellaneous Construction				200,000
				65,000
				279,840
				156,550
				100,000
				50,000
				50,000
				20,000
				1,709,502
				30,000
				50,000
				149,000
				50,000
				2,906,892
New construction				88,856
				23,280
				184,760
				296,896
Reconstruction; liners				20,520
				35,200
				17,000
				51,360
				15,847
				12,975
				182,902
Reconstruction - (on streets to be paved in 2019)				16,290
				313,150
				323,150
				17,100
				52,100
				35,800
				194,400
				15,650
				258,025
				146,300
				85,600
				4,300
				264,600
				1,726,465
Total				\$ 6,115,466

Description	2016 Actual	2017 Actual	2018 YTD Actual	2018 Adopted Budget	2018 Amended Budget	2019 Requested Budget	2019 Adopted Budget
REVENUES							
Intergovernmental Revenues	0	0	0	0	0	150,000	150,000
Permits	47,509	42,028	20,776	42,000	42,000	42,525	42,525
Interest Income	84,919	145,559	94,551	200,000	200,000	250,000	125,000
Charges for Services	9,342,501	9,429,295	4,071,946	9,415,000	9,415,000	10,565,454	10,801,200
Intergov. Charges for Service	740	9,452	0	0	0	0	0
Other Revenues	633,870	1,309,682	656,582	591,990	591,990	717,725	924,543
TOTAL REVENUES	10,109,539	10,936,016	4,843,855	10,248,990	10,248,990	11,725,704	12,043,268
EXPENSES BY LINE ITEM							
Regular Salaries	113,130	122,839	84,670	143,186	143,186	144,762	144,762
Labor Pool Allocations	778,656	771,181	584,812	1,090,352	1,090,352	1,125,179	1,125,179
Call Time	1,950	1,839	1,095	2,300	2,300	2,400	2,400
Overtime	35,453	25,407	10,468	24,943	24,943	24,925	24,925
Part-Time	6,346	10,422	12,736	14,602	14,602	15,925	15,925
Other Compensation	2,900	2,540	2,520	3,955	3,955	2,970	2,970
Shift Differential	1,294	1,450	171	1,690	1,690	0	0
Sick Pay	47,952	6,206	4,400	0	0	0	0
Vacation Pay	102,561	94,907	70,815	0	0	0	0
Fringes	407,066	452,968	290,312	486,869	486,869	520,573	515,122
Pension Expense / Revenue	89,464	99,895	0	0	0	0	0
Salaries & Fringe Benefits	1,586,772	1,589,654	1,061,999	1,767,897	1,767,897	1,836,734	1,831,283
Training & Conferences	2,637	3,479	4,420	7,500	7,500	7,500	7,500
Parking Permits	684	720	720	720	720	720	720
Office Supplies	294	153	22	250	250	250	250
Memberships & Licenses	13,100	14,415	13,055	15,015	15,015	15,020	15,020
Postage & Freight	18,264	20,053	11,150	22,000	22,000	22,000	23,000
Awards & Recognition	665	665	196	665	665	665	665
Insurance	39,936	47,005	32,049	42,730	42,730	44,260	44,260
Rent	55,710	55,210	0	55,210	55,210	55,210	55,210
Depreciation Expense	2,473,941	2,553,534	1,899,000	2,825,000	2,825,000	2,604,000	2,800,000
Uncollectible Accounts	1,346	1,806	393	1,400	1,400	1,900	1,900
Interest Payments	1,641,736	1,522,892	1,270,602	1,722,007	1,722,007	1,617,722	1,732,532
Debt Issuance Costs	198,317	76,889	24,500	150,000	150,000	150,000	90,000
Gain/Loss on Refund Amort.	48,550	136,117	110,421	147,227	147,227	144,000	140,016
Trans Out - General Fund	12,500	12,500	9,375	12,500	12,500	12,500	12,500
Administrative Expense	4,507,680	4,445,438	3,375,903	5,002,224	5,002,224	4,675,747	4,923,573
Landscape Supplies	10,846	946	972	6,360	6,360	3,860	3,860
Shop Supplies & Tools	745	2,298	2,834	2,250	2,250	2,950	2,950
Books & Library Materials	0	0	0	100	100	100	100
Miscellaneous Supplies	0	90	0	0	0	0	0
Printing & Reproduction	2,817	3,630	2,603	3,300	3,300	3,300	3,600
Clothing	161	145	124	150	150	150	150
Safety Supplies	352	884	219	350	350	350	350
Construction Materials	72,049	56,412	46,366	71,510	71,510	83,250	83,250
Miscellaneous Equipment	8,223	8,690	7,539	9,400	9,400	9,400	9,400
Supplies & Materials	95,193	73,095	60,657	93,420	93,420	103,360	103,660
Accounting/Audit	9,654	8,831	0	9,900	9,900	9,000	9,000
Legal Fees	510	330	808	400	400	400	400
Bank Services	16,653	16,097	9,625	18,120	18,120	18,120	18,120
Consulting Services	637,658	656,902	436,946	490,300	1,007,434	1,083,960	1,083,960
Contractor Fees	34,405	63,870	53,207	48,600	99,600	110,900	110,900
Advertising	92	0	0	0	0	0	0
Tipping Fees	31,176	402,725	265,149	50,000	427,633	50,400	50,400
Health Services	0	20	0	0	0	0	0
Other Contracts/Obligations	563,235	12,902	6,681	8,500	8,500	25,370	25,370
Purchased Services	1,293,383	1,161,677	772,416	625,820	1,571,587	1,298,150	1,298,150
Electric	274	495	1,941	310	310	500	500
Water	1,911	3,909	5,429	5,000	5,000	5,000	5,000
Telephone	609	737	607	840	840	840	840

City of Appleton
2019 Budget
Revenue and Expense Summary

Description	2016 Actual	2017 Actual	2018 YTD Actual	2018 Adopted Budget	2018 Amended Budget	2019 Requested Budget	2019 Adopted Budget
Cellular Telephone	240	240	180	264	264	264	264
Utilities	3,034	5,381	8,157	6,414	6,414	6,604	6,604
Equipment Repair & Maintenan	0	1,202	1,245	1,100	1,100	1,100	1,100
Facilities Charges	0	0	0	2,406	2,406	0	0
Software Support	12,994	12,131	5,302	5,975	5,975	16,800	16,800
CEA Equipment Rental	428,080	472,574	232,132	497,125	497,125	548,515	548,515
Grounds Repair & Maintenance	4,936	5,404	4,673	2,000	2,000	2,000	2,000
Repair & Maintenance	446,010	491,311	243,352	508,606	508,606	568,415	568,415
Land	80,020	652,560	38,586	430,000	467,000	235,000	235,000
Infrastructure Construction	2,441,123	7,821,893	2,516,067	5,276,136	6,624,446	5,085,155	5,085,155
Other Capital Outlay	2,787,022-	8,330,886-	0	0	0	0	0
Capital Expenditures	265,879-	143,567	2,554,653	5,706,136	7,091,446	5,320,155	5,320,155
TOTAL EXPENSES	7,666,193	7,910,123	8,077,137	13,710,517	16,041,594	13,809,165	14,051,840

CITY OF APPLETON 2019 BUDGET
STORMWATER UTILITY
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS

	2016 Actual	2017 Actual	2018 Budget	2018 Projected	2019 Budget
Revenues					
Charges for Services	\$ 9,339,293	\$ 9,428,127	\$ 9,415,000	\$ 9,415,000	\$ 10,800,000
Miscellaneous	93,435	171,876	77,000	77,000	98,725
Total Revenues	<u>9,432,728</u>	<u>9,600,003</u>	<u>9,492,000</u>	<u>9,492,000</u>	<u>10,898,725</u>
Expenses					
Operating Expenses	3,291,148	3,608,192	3,254,659	3,327,543	3,661,306
Depreciation	2,473,940	2,553,534	2,825,000	2,670,000	2,800,000
Total Expenses	<u>5,765,088</u>	<u>6,161,726</u>	<u>6,079,659</u>	<u>5,997,543</u>	<u>6,461,306</u>
Operating Income (Loss)	3,667,640	3,438,277	3,412,341	3,494,457	4,437,419
Non-Operating Revenues (Expenses)					
Interest Income	84,919	145,558	200,000	125,000	125,000
Interest Expense	(1,641,736)	(1,522,892)	(1,722,007)	(1,706,683)	(1,732,532)
Gain/Loss on Refunding	(48,550)	(136,117)	(147,227)	(147,227)	(140,016)
Amortization of Premium on Debt Issue	176,209	405,852	395,435	414,826	406,818
Debt Expense	(198,317)	(76,889)	(150,000)	(150,000)	(90,000)
Other	-	-	-	250,000	-
Total Non-Operating	<u>(1,627,475)</u>	<u>(1,184,488)</u>	<u>(1,423,799)</u>	<u>(1,214,084)</u>	<u>(1,430,730)</u>
Income (Loss) Before Contributions and Transfers	2,040,165	2,253,789	1,988,542	2,280,373	3,006,689
Contributions and Transfers In (Out)					
Capital Contributions	415,683	784,603	161,555	-	612,725
Transfer In - Wastewater	-	-	-	-	-
Transfer Out - General Fund	<u>(12,500)</u>	<u>(12,500)</u>	<u>(12,500)</u>	<u>(12,500)</u>	<u>(12,500)</u>
Change in Net Assets	2,443,348	3,025,892	2,137,597	2,267,873	3,606,914
Total Net Assets - Beginning	<u>66,883,275</u>	<u>69,326,623</u>	<u>72,352,515</u>	<u>72,352,515</u>	<u>74,620,388</u>
Total Net Assets - Ending	<u>\$ 69,326,623</u>	<u>\$ 72,352,515</u>	<u>\$ 74,490,112</u>	<u>\$ 74,620,388</u>	<u>\$ 78,227,302</u>

SCHEDULE OF CASH FLOWS

Cash - Beginning of the Year	\$ 12,571,944	\$ 9,417,500
+ Change in Net Assets	2,267,873	3,606,914
+ Depreciation	2,670,000	2,800,000
+ Long Term Debt	3,000,000	4,200,000
- Contributed Capital	-	(612,725)
- Fixed Assets	(7,857,317)	(5,615,486)
- Principal Repayment	(3,235,000)	(3,315,000)
Working Cash - End of Year	<u>\$ 9,417,500</u>	<u>\$ 10,481,203</u>

The current annual rate of \$155.00 per ERU became effective July 1, 2013. Rate to increase on January 1, 2019 to \$175.00 per ERU; this is a 13% increase. Council approved a rate increase plan on June 15, 2011, that approved a rate increase of no higher than 18% in 2016. This 2016 rate increase was postponed until 2019, until it was needed to support increased expense and to maintain debt covenants.

**CITY OF APPLETON 2019 BUDGET
STORMWATER UTILITY
CALCULATION OF RATE INCREASE DOCUMENTATION**

	2018 Budget	2018 Projected	2019 Budget	2020 Projected	2021 Projected	2022 Projected	2023 Projected
Revenues							
Charges for Services	\$ 9,415,000	\$ 9,415,000	\$ 10,800,000	\$ 10,854,000	\$ 10,908,270	\$ 10,962,811	\$ 11,017,625
Miscellaneous	77,000	77,000	98,725	75,000	75,000	75,000	75,000
Total Revenues	9,492,000	9,492,000	10,898,725	10,929,000	10,983,270	11,037,811	11,092,625
Expenses							
Operating Expenses	3,254,659	3,327,543	3,661,306	3,771,145	3,884,280	4,000,808	4,120,832
Depreciation	2,825,000	2,670,000	2,800,000	2,925,000	3,075,000	3,225,000	3,375,000
Total Expenses	6,079,659	5,997,543	6,461,306	6,696,145	6,959,280	7,225,808	7,495,832
Operating Income	3,412,341	3,494,457	4,437,419	4,232,855	4,023,990	3,812,003	3,596,793
Non-Operating Revenues (Expenses)							
Interest Income	200,000	125,000	125,000	150,000	150,000	150,000	150,000
Interest Expense	(1,722,007)	(1,706,683)	(1,732,532)	(1,770,772)	(1,747,586)	(1,726,097)	(1,715,134)
Gain/Loss on Refunding	(147,227)	(147,227)	(140,016)	(142,690)	(127,533)	(112,757)	(98,590)
Premium on Debt Issue	395,435	414,826	406,818	378,286	341,772	305,651	270,607
Debt Issue Expense	(150,000)	(150,000)	(90,000)	(125,000)	(125,000)	(125,000)	(125,000)
Other	-	250,000	-	-	-	-	-
Total Non-Operating	(1,423,799)	(1,214,084)	(1,430,730)	(1,823,742)	(1,508,348)	(1,508,203)	(1,518,118)
Net Income Before Transfers	1,988,542	2,280,373	3,006,689	2,409,113	2,515,643	2,303,800	2,078,676
Contributions and Transfers In (Out)							
Capital Contributions	161,555	-	612,725	-	-	-	-
Capital Projects	-	-	-	-	-	(70,000)	-
General Fund	(12,500)	(12,500)	(12,500)	(12,500)	(12,500)	(12,500)	(12,500)
Change in Net Assets	2,137,597	2,267,873	3,606,914	2,396,613	2,503,143	2,221,300	2,066,176
Total Net Assets - Beginning	72,352,515	72,352,515	74,620,388	78,227,302	80,623,915	83,127,057	85,348,357
Total Net Assets - Ending	\$ 74,490,112	\$ 74,620,388	\$ 78,227,302	\$ 80,623,915	\$ 83,127,057	\$ 85,348,357	\$ 87,414,533

SCHEDULE OF CASH FLOWS

Cash - Beginning of the Year	12,571,944	9,417,500	10,481,203	11,387,513	12,492,329	12,934,166	
+ Change in Net Assets	2,267,873	3,606,914	2,396,613	2,503,143	2,221,300	2,066,176	
+ Depreciation	2,670,000	2,800,000	2,925,000	3,075,000	3,225,000	3,375,000	
+ Long Term Debt	3,000,000	4,200,000	3,000,000	2,200,000	3,500,000	4,800,000	
- Contributed Capital	-	(612,725)	-	-	-	-	
- Fixed Assets	(7,857,317)	(5,615,486)	(3,970,303)	(2,963,326)	(4,769,463)	(6,457,621)	
- Principal Repayment	(3,235,000)	(3,315,000)	(3,445,000)	(3,710,000)	(3,735,000)	(3,775,000)	
Working Cash - End of Year	\$ 9,417,500	\$ 10,481,203	\$ 11,387,513	\$ 12,492,329	\$ 12,934,166	\$ 12,942,721	
25% Working Capital Reserve (prior year's audited expenses)		1,261,682	1,351,585	1,388,604	1,411,091	1,452,351	
Coverage Ratio		1.34	1.61	1.36	1.34	1.32	1.30

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 2019
Operating expenses to increase 3.0% per year after 2019
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. Rate to increase on January 1, 2019 to \$175 per ERU; this is a 13% increase. The planned increase for July 1, 2016 as part of the plan presented to Council on June 15, 2011 has been postponed until 2019. Rates will be monitored on an annual basis for adjustment based on actual results or changes in circumstances.

**CITY OF APPLETON 2019 BUDGET
STORMWATER UTILITY
LONG TERM DEBT**

Year	2009		2012		2013		2014	
	Revenue Bonds		Revenue Bonds		Revenue Bonds		Revenue Bonds	
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
2019	\$ 360,000	\$ 3,600	\$ 1,100,000	\$ 248,665	\$ 270,000	\$ 216,819	\$ 145,000	\$ 108,375
2020	-	-	1,145,000	203,315	280,000	208,494	150,000	104,275
2021	-	-	1,190,000	156,165	290,000	197,694	155,000	99,663
2022	-	-	880,000	117,865	300,000	185,794	160,000	94,900
2023	-	-	740,000	92,415	315,000	173,344	160,000	90,100
2024	-	-	495,000	75,728	325,000	160,444	170,000	85,075
2025	-	-	255,000	66,086	340,000	146,894	175,000	78,550
2026	-	-	260,000	58,065	355,000	132,844	180,000	71,400
2027	-	-	270,000	49,773	370,000	118,294	190,000	63,900
2028	-	-	280,000	41,170	385,000	101,961	195,000	56,150
2029	-	-	285,000	32,053	400,000	84,625	205,000	48,050
2030	-	-	295,000	22,547	420,000	66,469	210,000	39,700
2031	-	-	305,000	12,716	435,000	47,194	220,000	31,000
2032	-	-	315,000	2,559	460,000	26,775	230,000	21,900
2033	-	-	-	-	480,000	5,400	240,000	12,400
2034	-	-	-	-	-	-	250,000	2,500
2035	-	-	-	-	-	-	-	-
	<u>\$ 360,000</u>	<u>\$ 3,600</u>	<u>\$ 7,815,000</u>	<u>\$ 1,179,122</u>	<u>\$ 5,425,000</u>	<u>\$ 1,873,245</u>	<u>\$ 3,035,000</u>	<u>\$ 1,007,938</u>

Year	2015		2015		2016		2016	
	Revenue Bonds		Refunding Bonds		Revenue Bonds		Refunding Bonds	
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
2019	\$ 165,000	\$ 139,825	\$ 470,000	\$ 157,600	\$ 110,000	\$ 94,950	\$ 695,000	\$ 439,875
2020	170,000	135,175	480,000	144,450	115,000	90,950	1,055,000	404,750
2021	175,000	129,963	495,000	129,713	120,000	86,200	965,000	365,250
2022	180,000	123,250	510,000	110,700	125,000	81,250	1,005,000	325,450
2023	185,000	115,900	545,000	89,250	130,000	76,100	1,050,000	283,900
2024	195,000	108,200	550,000	67,300	135,000	70,750	1,090,000	240,700
2025	200,000	100,250	580,000	44,400	140,000	65,200	1,130,000	195,900
2026	210,000	91,950	600,000	20,600	145,000	59,450	1,180,000	149,200
2027	220,000	83,250	365,000	3,650	150,000	53,500	1,230,000	100,500
2028	230,000	74,150	-	-	160,000	47,200	1,280,000	49,800
2029	235,000	64,800	-	-	165,000	40,650	925,000	9,250
2030	245,000	55,100	-	-	170,000	35,175	-	-
2031	255,000	45,000	-	-	175,000	29,963	-	-
2032	265,000	34,500	-	-	180,000	24,600	-	-
2033	280,000	23,450	-	-	185,000	19,088	-	-
2034	290,000	13,038	-	-	190,000	13,425	-	-
2035	300,000	2,625	-	-	195,000	7,613	-	-
2036	-	-	-	-	205,000	1,538	-	-
	<u>\$ 3,800,000</u>	<u>\$ 1,340,426</u>	<u>\$ 4,595,000</u>	<u>\$ 767,663</u>	<u>\$ 2,795,000</u>	<u>\$ 897,602</u>	<u>\$ 11,605,000</u>	<u>\$ 2,564,675</u>

Year	2017		2018		TOTAL		Total
	Revenue Bonds		Revenue Bonds		Principal	Interest	
	Principal	Interest	Principal	Interest			
2019	\$ -	\$ 166,013	\$ -	\$ 114,810	\$ 3,315,000	\$ 1,690,532	\$ 5,005,532
2020	50,000	165,263	-	116,100	3,445,000	1,572,772	5,017,772
2021	165,000	162,238	-	116,100	3,575,000	1,442,986	5,017,986
2022	210,000	156,588	120,000	112,500	3,490,000	1,308,297	4,798,297
2023	215,000	150,175	125,000	107,550	3,465,000	1,178,734	4,643,734
2024	225,000	143,500	130,000	103,863	3,315,000	1,055,560	4,370,560
2025	230,000	136,638	130,000	100,613	3,180,000	934,631	4,114,631
2026	235,000	127,863	135,000	95,750	3,300,000	807,222	4,107,222
2027	245,000	118,163	140,000	90,200	3,180,000	681,230	3,861,230
2028	255,000	108,063	145,000	84,450	2,930,000	562,944	3,492,944
2029	270,000	97,413	155,000	78,350	2,640,000	455,191	3,095,191
2030	280,000	86,313	160,000	72,000	1,780,000	377,304	2,157,304
2031	290,000	74,813	165,000	65,450	1,845,000	306,136	2,151,136
2032	300,000	65,163	175,000	58,550	1,925,000	234,047	2,159,047
2033	310,000	55,938	180,000	51,400	1,675,000	167,676	1,842,676
2034	320,000	46,413	185,000	44,050	1,235,000	119,426	1,354,426
2035	330,000	36,278	195,000	36,350	1,020,000	82,866	1,102,866
2036	340,000	19,963	200,000	21,800	745,000	43,301	788,301
2037	350,000	11,619	210,000	15,600	560,000	27,219	587,219
2038	360,000	2,925	220,000	9,100	580,000	12,025	592,025
2039	-	-	230,000	2,300	230,000	2,300	232,300
	<u>\$ 5,000,000</u>	<u>\$ 1,931,342</u>	<u>\$ 3,000,000</u>	<u>\$ 1,494,586</u>	<u>\$ 47,430,000</u>	<u>\$ 13,062,399</u>	<u>\$ 60,492,399</u>

Note: Schedule is based on accrual method of accounting. Revenue bonds in amount of \$4,200,000 will be issued in 2019. Expected interest expense of the issue in 2019 is \$42,000 at 4%.

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: Stormwater Program

PROJECT DESCRIPTION

Justification:

The following is a summary of costs associated with replacing and adding to the stormwater system. A five year plan detailing this and future years' projects follows this summary.

Discussion of operating cost impact:

Reconstruction is performed based upon the existing condition and expected useful remaining life of the stormwater structure (primarily storm sewers and detention ponds). However, budget constraints limit the number of stormwater structures which can be reconstructed annually to an amount less than that which actually meets the criteria for reconstruction.

Typically, less than 1% of our stormwater structures are reconstructed on an annual basis. This fact, coupled with new structures added annually to the system results in no overall reduction in our City-wide stormwater maintenance costs.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE	2019	2020	2021	2022	2023	Total
Stormwater Reconstruction Stormwater Utility	6,116,280	4,470,303	3,463,326	5,269,463	6,957,621	\$ 26,276,993
Stormwater Construction TIF # 11	462,725	-	-	-	-	\$ 462,725
Total - Stormwater Program	\$ 6,579,005	\$ 4,470,303	\$ 3,463,326	\$ 5,269,463	\$ 6,957,621	\$ 26,739,718

COST ANALYSIS

Estimated Cash Flows

Components	2019	2020	2021	2022	2023	Total
Planning	530,000	365,000	280,000	270,000	270,000	\$ 1,715,000
Land Acquisition	235,000	-	234,170	-	30,000	\$ 499,170
Construction	5,547,880	3,830,303	2,674,656	4,736,973	6,399,121	\$ 23,188,933
Other	266,125	275,000	274,500	262,490	258,500	\$ 1,336,615
Total	\$ 6,579,005	\$ 4,470,303	\$ 3,463,326	\$ 5,269,463	\$ 6,957,621	\$ 26,739,718
Operating Cost Impact	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
STORM SEWER CAPITAL CONSTRUCTION PROGRAM**

2019	Street	From	To	Storm-water Utility	TIF # 11	Total Cost
Labor Pool				256,125		256,125
CEA				10,000		10,000
Consulting Services	Construction Services			100,000		100,000
	Grant Applications			10,000		10,000
	Land Acquisition Services			10,000		10,000
	Modeling for Storm Sewer Const Projects			20,000		20,000
	North Side Development Corridor Study Update			100,000		100,000
	Rubyred Box Culvert Design/CRS			100,000		100,000
	Spartan Dr - SW2-SW5, box culvert, ret wa	SW2-SW5 and Bear Creek final design		130,000		130,000
	Valley Road Urbanization BMP's	design		60,000		60,000
	Subtotal			530,000		530,000
Land Acquisition	Spartan Dr - SW2-SW5 , box culvert, flood storage		Land Acquisition	235,000		235,000
	Subtotal			235,000		235,000
Miscellaneous Construction	Sump Pump Storm Sewer Program/Backyard Drainage Problems			200,000		200,000
	Surface restoration for mini sewer from previous year			65,000		65,000
	Storm Laterals, Manholes, Inlets, Mini's Prior to 2019 Asphalt Paving (B-19)			279,840		279,840
	Storm Laterals, Manholes, Inlets, Mini's Prior to 2019 New Concrete Paving (A-19)			156,550		156,550
	Apple Ridge Bridge Cost Share			100,000		100,000
	Downtown Stormwater Management/Incentive Program			50,000		50,000
	Flood Report Projects			50,000		50,000
	Kernan Ave storm sewer spot repair	easement w/o Kernan	across for Dewey	20,000		20,000
	Leona Street Pond			1,709,502		1,709,502
	Native Vegetation			30,000		30,000
	NRI151 Water Quality Practices - Reconst			50,000		50,000
	Spartan Drive Bear Creek Box Culvert			148,000		148,000
	Wetlands Permit In-Lieu Fees			50,000		50,000
	Subtotal			2,908,892		2,908,892
New Storm Sewers	Haymeadow Ave	Spartan Ave (750' s/o)	Spartan Ave	88,866		88,866
	Sommers Dr	Spartan Ave, 100' s/o	Spartan Ave, 400' n/o	23,280		23,280
	Spartan Dr	Trico east property line	Haymeadow Ave	184,750		184,750
	Subtotal			296,896		296,896
Reconstruction	College Ave (liner)	Kensington Dr, 54' e/o	Kensington Dr	20,520		20,520
	Kernan Ave easement (liner)	Kernan Ave	ravine	35,200		35,200
	Marquette St (liner)	Ullman St, 220' e/o	Alexander St, 200' w/o	17,000		17,000
	Perkins St (liner)	under RR		51,360		51,360
	Summit St (liner)	Winnebago St	Commercial St	15,847		15,847
	Wisconsin Ave (liner)	Wisconsin Ct	Jardin Ct, 60' w/o	12,975		12,975
	Subtotal			152,902		152,902
Reconstruction (on streets to be paved in 2020)	Alley n/o Spencer St	Spruce St	Summit St	16,290		16,290
	Appleton St	Lawrence St	College Ave	-	26,125	26,125
	Carpenter St	Calumet St	Taft Ave	313,150		313,150
	Carpenter St	Fremont St	Calumet St	323,150		323,150
	Erb St	Michigan St	Michigan St, 130' n/o	17,100		17,100
	Harriet St	Walter Ave	Telulah Ave	52,100		52,100
	Henry St	Werner St	Telulah Ave	35,800		35,800
	Lawrence St	Appleton St	Oneida St	-	86,600	86,600
	Morrison St	Hancock St	Wisconsin Ave	194,400		194,400
	Opechee St	Pacific St	Pacific St, w/o	15,650		15,650
	Prospect Ave	Bartell Dr	Haskell St	258,025		258,025
	Prospect Ave (CTH BB)	Seminole Dr	Bartell Dr	146,300		146,300
	Randall St	Oneida St	Meade St	85,600		85,600
	Rocky Bleler Run	Water St	park	-	350,000	350,000
	Warner St	College Ave	Henry St	4,300		4,300
	Winnebago St	Division St	Drew St	264,600		264,600
	Subtotal			1,726,465	462,725	2,189,190
Total				\$ 6,116,280	\$ 462,725	\$ 6,579,005

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
STORM SEWER CAPITAL CONSTRUCTION PROGRAM**

2020	Street	From	To	Storm-water Utility
Labor Pool				267,000
CEA				8,000
Consulting Services	Construction Grant Applications			10,000
	Construction Services			50,000
	French Road Urbanization n/o CTH JJ	BMP prelim design/mode		50,000
	Land Acquisition Services			10,000
	Modeling for Storm Sewer Const Projects			20,000
	North Side Development Corridor Prelim Design			225,000
	Subtotal			365,000
Land Acquisition	Subtotal			-
Miscellaneous Construction	Sump Pump Storm Sewer Program/Backyard Drainage Problems			200,000
	Surface restoration for mini sewer from previous year			90,000
	Storm Laterals, Manholes, Inlets, Mini's Prior to 2020 Asphalt Paving (B-20)			218,848
	Storm Laterals, Manholes, Inlets, Mini's Prior to 2020 New Concrete Paving (A-20)			78,155
	Downtown Stormwater Management/Incentive Program			50,000
	Flood Report Projects			50,000
	Native Landscaping			30,000
	NR151 Water Quality Practices - Reconstrs			50,000
	Rubyred Box Culvert	construction		200,000
	Spartan Dr - SW2-SW5, box culvert, flood storage, ret. Wall		construction	756,000
	Valley Road Urbanization BMPs	construction		150,000
	Subtotal			1,873,003
New Storm Sewers	Subtotal			-
Reconstruction	Subtotal			-
Reconstruction (on streets to be paved in 2021)	Douglas St	Reid Dr	Prospect Ave	73,850
	Glendale Ave	Mason St	Richmond St	267,450
	Harris St	Badger Ave	Richmond St	225,650
	Jackson St	Calumet St	Fremont St	148,900
	Lawrence St	Oneida St	Morrison St	63,500
	Madison St	Calumet St	Taft Ave	139,800
	Minor St	Meade St	Rankin St	46,500
	Morrison St	Lawrence St, s/o	College Ave	48,350
	Newberry Ave	Schaefer St	city limits	476,100
	Oneida St	Lawrence St	College Ave	31,550
	Summer St	Gillett St	Story St	224,400
	Summer St	Story St	Richmond St	87,250
	Valley Road	Chain Dr	Forestview Dr	124,000
	Subtotal			1,957,300
Total				\$ 4,470,303

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
STORM SEWER CAPITAL CONSTRUCTION PROGRAM**

2021	Street	From	To	Storm-Water Utility
Labor Pool				266,500
CEA				8,000
Consulting Services	Apple Creek Road e/o Richmond Drainage Stud			50,000
	Construction Grant Applications			10,000
	Construction Services			50,000
	Edgewood Drive (600' e/o Lightning to French BMPs Modeling/Prelim Engineering			50,000
	Land Acquisition Services			10,000
	Modeling for Storm Sewer Const Projects			20,000
	Spartan Dr - SW6-SW7 and Apple Creek X-ing	Final Design/SDC		90,000
	Subtotal			280,000
Land Acquisition	Northside Development Corridor Land for BMPs			100,000
	Spartan Dr - SW6 (Baum)			134,170
	Subtotal			234,170
Miscellaneous Construction	Sump Pump Storm Sewer Program/Backyard Drainage Problems			250,000
	Surface restoration for mini sewer from previous year			90,000
	Storm Laterals, Manholes, Inlets, Mini's Prior to 2021 Asphalt Paving (B-21)			174,992
	Storm Laterals, Manholes, Inlets, Mini's Prior to 2021 New Concrete Paving (A-21)			205,824
	Downtown Stormwater Management/Incentive Program			50,000
	Flood Reports Project			50,000
	Native Landscaping			50,000
	NR151 Water Quality Practices - Reconst			50,000
	Subtotal			920,816
New Storm Sewers	Spartan Dr	Haymeadow Ave	Haymeadow Ave 900' e/o (Baum property lin	67,500
	Subtotal			67,500
Reconstruction				-
	Subtotal			-
Reconstruction (on streets to be paved in 2022)	Alvin St	Wisconsin Ave	Marquette St	341,975
	Appleton St	College Ave	Atlantic St	150,550
	Atlantic St	Oneida St	Lowe St	88,050
	Douglas St	Badger Ave	Wisconsin Ave	100,330
	Elsie St	Mason St	Richmond St	180,325
	Linwood Ave	College Ave	Summer Ave	299,550
	Meade St	Pacific St	Commercial St	182,535
	Morrison St	Wisconsin Ave	Glendale Ave	343,025
	Subtotal			1,686,340
Total				\$ 3,463,326

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
STORM SEWER CAPITAL CONSTRUCTION PROGRAM**

2022	Street	From	To	Total Cost
Labor Pool				251,500
CEA				10,990
Consulting Services	Apple Creek Road e/o Richmond	Design BMPs		60,000
	Construction Grant Applications			10,000
	Construction Services			70,000
	Edgewood Drive (600' e/o Lightning to French)		Design BMPs	50,000
	Land Acquisition Services			10,000
	Modeling for Storm Sewer Const Projects			20,000
	North Side Development Corridor	Study Update		50,000
	Subtotal			270,000
Land Acquisition				-
	Subtotal			-
Miscellaneous Construction	Sump Pump Storm Sewer Program/Backyard Drainage Problems			250,000
	Surface restoration for mini sewer from previous year			85,000
	Storm Laterals, Manholes, Inlets, Mini's Prior to 2022 Asphalt Paving (B-22)			179,200
	Storm Laterals, Manholes, Inlets, Mini's Prior to 2022 New Concrete Paving (A-122)			205,023
	Downtown Stormwater Management/Incentive Program			50,000
	Flood Report Projects			50,000
	Lions Park Pond	Park Amenities		500,000
	Native Landscaping			30,000
	Northside Development Corridor	Construct bridge, BMPs, storm sewer		1,546,000
	NR151 Water Quality Practices - Reconst			50,000
	NR216 High Efficiency Sweeper (upgrade)			70,000
	Subtotal			3,015,223
New Storm Sewers	Apple Creek Rd	Richmond St (STH 47)	Brookshire Dr -125' w/o	210,000
	Spartan Dr	Haymeadow Ave, 900' e	Meade St	138,750
	Subtotal			348,750
Reconstruction				-
	Subtotal			-
Reconstruction (on streets to be paved in 2023)	Alice St	Drew St	Union St	50,800
	Atlantic St	Richmond St (STH 47)	Oneida St	210,400
	Badger Ave	Spencer St	Pierce Ave	138,000
	Badger Ave	Washington St	Mason St	161,000
	Bartell Dr	Prospect Ave	Pine St	88,720
	Bates St	Dunlap St	Pacific St	28,405
	College Ave (STH 125)	Linwood Ave	Lilas Dr	88,200
	Dunlap St	Bates St	Pacific St	16,125
	Fourth St	Outagamie St	Mason St	52,500
	Fourth St	Story St	Memorial Dr	104,625
	Locust St	College Ave	Washington St	32,200
	Locust St	Washington St	Franklin St	54,625
	Summer St	Richmond St	Oneida St	195,600
	Summit St	Prospect Ave	Fourth St	55,200
	Washington St	Bennett St	Richmond St	96,600
	Subtotal			1,373,000
Total				\$ 5,269,463

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
STORM SEWER CAPITAL CONSTRUCTION PROGRAM**

2023	Street	From	To	Total Cost
Labor Pool				251,500
CEA				7,000
Consulting Services	Construction Services			50,000
	Grant Applications			10,000
	Land Acquisition Services			10,000
	Lions Park Pond	Preliminary Engineering		75,000
	Modeling for Storm Sewer Const Projects			25,000
	North Side Development Corridor	Bridge/BMP design		100,000
	Subtotal			270,000
Land Acquisition	Apple Creek Road e/o Richmond	Land for BMPs	land acquisition	30,000
	Subtotal			30,000
Miscellaneous Construction	Sump Pump Storm Sewer Program/Backyard Drainage Problems			250,000
	Surface restoration for mini sewer from previous year			85,000
	Storm Laterals, Manholes, Inlets, Mini's Prior to 2023 Asphalt Paving (B-23)			257,648
	Storm Laterals, Manholes, Inlets, Mini's Prior to 2023 New Concrete Paving (A-23)			216,988
	Downtown Stormwater Management/Incentive Program			50,000
	Edgewood Drive (600' e/o Lightning to French)		BMP Const	200,000
	Flood Reduction Projects			1,500,000
	Native Landscaping			30,000
	NR151 Water Quality Practices - Reconst			50,000
	Spartan BMP 6-7, Apple Creek Crossing			508,000
	Spartan Dr - SW6-SW7 and Apple Creek Construction			508,000
	Subtotal			3,655,636
New Storm Sewers	Ballard Rd	Bridge @	Apple Creek North Reach	248,000
	Ballard Rd	Bridge @	Apple Creek South Reach	180,000
	Ballard Rd	Edgewood Dr - 400' n/o	Apple Creek Rd - 300' n/o	288,000
	Ballard Rd	Water Quality	10' catchbasins	192,000
	Subtotal			908,000
Reconstruction	Subtotal			-
Reconstruction (on streets to be paved in 2024)	Subtotal			-
	Bell Avenue	Summit St	Richmond St	202,860
	Driscoll St	Prospect Ave	WI Central RR	102,600
	Durkee St	College Ave	Washington St	26,250
	Durkee St	Lawrence St	College Ave	26,250
	Glendale Ave	Meade St	Ballard Rd	407,250
	Glendale Ave	Roemer Rd	Sandra St	218,325
	Lawe St	College Ave	Spring St	34,445
	Lawrence St	Morrison St	Durkee St	51,750
	Morrison St	College Ave	Washington St	40,250
	Morrison St	Glendale Ave	Pershing St	107,850
	Oklahoma St	Mason St	Richmond St	197,925
	Outagamie St	College Ave	Packard St	109,500
	Owaisa St	Opechee St	Pacific St	197,925
	Rankin St	College Ave	Alton St	62,880
	Summit St	Packard St	Elsie St	49,425
	Subtotal			1,835,485
Total				\$ 6,957,621

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: Watermain Program

PROJECT DESCRIPTION

Justification:

The following is a summary of costs associated with replacing and adding watermains. A five year plan detailing this and future years' projects follows this summary.

Discussion of operating cost impact:

Reconstruction is performed based upon the existing condition and expected useful remaining life of the watermain. However, budget constraints limit the number of watermains which can be reconstructed annually to an amount less than that which actually meets the criteria for reconstruction.

Typically, less than 1% of our watermains are reconstructed on an annual basis. This fact, coupled with new watermains added annually to the system results in no overall reduction in our City-wide watermain maintenance costs.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE	2019	2020	2021	2022	2023	Total
Water Dist. Reconstruction Water Utility	3,801,052	4,418,407	2,717,482	3,792,622	3,961,867	\$ 18,691,430
Water Dist. Construction TIF 11	229,300	237,775	-	160,060	363,900	\$ 991,035
Total - Watermain Program	\$ 4,030,352	\$ 4,656,182	\$ 2,717,482	\$ 3,952,682	\$ 4,325,767	\$ 19,682,465

COST ANALYSIS

Components	Estimated Cash Flows					Total
	2019	2020	2021	2022	2023	
Planning	-	-	-	-	-	\$ -
Land Acquisition	-	-	-	-	-	\$ -
Construction	3,774,700	4,380,100	2,441,400	3,676,600	4,049,685	\$ 18,322,485
Other	255,652	276,082	276,082	276,082	276,082	\$ 1,359,980
Total	\$ 4,030,352	\$ 4,656,182	\$ 2,717,482	\$ 3,952,682	\$ 4,325,767	\$ 19,682,465
Operating Cost Impact	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
WATERMAIN CONSTRUCTION CAPITAL IMPROVEMENT PROGRAM**

2019	Street	From	To	Water Utility	TIF 11	Total Cost
Labor Pool				249,452	-	249,452
CEA				6,200		6,200
Miscellaneous	Edison River Crossing design			100,000		100,000
Construction	Permit;Fees;Training;Testing	NOI, Railroad, Water Usage, County		10,000		10,000
	Surface Restoration	Due to 2018 Water CIP Excav.		141,300		141,300
	Subtotal			251,300	-	251,300
New Construction	Easement w/o Walter	Gunn St	Harriet St	51,000		51,000
	Apple Ridge Watermain Loop			80,000		80,000
	Haymeadow Ave	Bluewater Way (165' n/o)	Spartan Ave	86,250		86,250
	Rocky Bleier Run	Water St	Jones Park	-	86,250	86,250
	Sommers Dr	Spartan Ave, 100' s/o	Spartan Ave, 400' n/o	59,500		59,500
	Spartan Dr	Trico east property line	Haymeadow Ave	305,250		305,250
	Subtotal			582,000	86,250	668,250
Reconstruction (not related to paving)	Gunn St	Walter Ave	west end	64,750		64,750
	Walter Ave	College Ave (125' n/o)	Gunn St	37,750		37,750
	Subtotal			102,500	-	102,500
Reconstruction (prior to next year's paving)	Appleton St	Lawrence St	College Ave	-	62,500	62,500
	Carpenter St	Fremont St	Calumet St	233,000	-	233,000
	Erb St	Michigan St	Michigan St, 130' n/o	24,250		24,250
	Harriet St	Walter Ave	west end	64,750	-	64,750
	Henry St	Warner Rd (100' w/o)	Telulah Ave	75,000		75,000
	Lawrence St	Appleton St	Oneida St	-	80,550	80,550
	Morrison St	Hancock St	Wisconsin Ave	206,750		206,750
	Outagamie St - partial only	Taylor St	Glendale Ave	86,000		86,000
	Prospect Ave	Bartell Dr	Haskell St	625,000		625,000
	Prospect Ave (CTH BB)	Seminole Dr	Bartell Dr	412,000		412,000
	Randall St	Oneida St	Meade St	314,000		314,000
	State St - partial only	Prospect Ave	Sixth St	197,100		197,100
	Warner St	College Ave	Henry St	37,000		37,000
	Winnebago St	Division St	Drew St	334,750		334,750
	Subtotal			2,609,600	143,050	2,752,650
Transmission - New	Subtotal			-	-	-
Total Water Main Construction				\$ 3,801,052	\$ 229,300	\$ 4,030,352

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
WATERMAIN CONSTRUCTION CAPITAL IMPROVEMENT PROGRAM**

2020	Street	From	To	Water Utility	TIF 11	Total Cost
Labor Pool				266,082	-	266,082
CEA				10,000		10,000
Miscellaneous Construction	Permit;Fees;Training;Testing	NOI, Railroad, Water Usage, County		10,000		10,000
	S. Island St	bridge design for water main		12,000		12,000
	Surface Restoration	Due to 2019 Water CIP Excav.		99,500		99,500
	Subtotal			121,500	-	121,500
New Construction	Northside Rd	TBD	TBD	95,000		95,000
	Subtotal			95,000	-	95,000
Reconstruction (not related to paving)	Easement (e/o Riverview Ln)	River Rd	Bouten St	166,750		166,750
	Edison St river crossing			500,000		500,000
	Kenilworth Ave	Wisconsin Ave	Woodland Ave	219,250		219,250
	Lawrence St	Walnut St	Elm St	154,750		154,750
	Pacific St	Wisconsin Central Ltd.	Ida St	80,000		80,000
	Vulcan St	N. Island St	S. Island St	89,000		89,000
	Subtotal			1,209,750	-	1,209,750
Reconstruction (prior to next year's paving)	Douglas St	Reid Dr	Prospect Ave	113,300		113,300
	Glendale Ave	Mason St	Richmond St	377,500		377,500
	Harris St	Badger Ave	Richmond St	233,300		233,300
	Jackson St	Calumet St	Fremont St	338,575		338,575
	Lawrence St	Oneida St	Morrison St	-	69,300	69,300
	Madison St	Calumet St	Taft St (Hoover St actually)	138,000		138,000
	Minor St	Meade St	Rankin St	80,850		80,850
	Morrison St	Washington St	Lawrence St (Kimball St act.)	-	120,725	120,725
	Newberry St	Schaefer St	STH "441"	787,500		787,500
	Oneida St	Lawrence St	College Ave	-	47,750	47,750
	Roemer Rd - BRIDGE	s/o "OO"	over drainage ditch	63,250		63,250
	Summer St	Gillett St	Story St	137,500		137,500
	Summer St	Story St	Richmond St	-		-
	Subtotal			2,269,775	237,775	2,507,550
Transmission - New	River crossing repair	Edison St	Water St	446,300		446,300
	Subtotal			446,300	-	446,300
Total Water Main Construction				\$ 4,418,407	\$ 237,775	\$ 4,656,182

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
WATERMAIN CONSTRUCTION CAPITAL IMPROVEMENT PROGRAM**

2021	Street	From	To	Water Utility
Labor Pool				266,082
CEA				10,000
Miscellaneous	Permit; Misc.Fees; Training; Testing Mat'l			10,000
Construction	Surface Restoration			83,250
	Subtotal			93,250
New Construction	Spartan Dr	Haymeadow Ave	Haymeadow Ave	105,200
	Subtotal			105,200
Reconstruction (not related to paving)				
	Subtotal			-
Reconstruction (prior to next year's paving)	Alvin St	Wisconsin Ave	Marquette St	152,000
	Appleton St (Rec "D" of Wat Dist. Study)	College Ave	Atlantic St	400,000
	Atlantic St	Oneida St	Lowe St	342,500
	Douglas St	Badger Ave	Wisconsin Ave	114,300
	Elsie St	Mason St	Richmond St	471,250
	Linwood Ave	College Ave	Summer Ave	206,550
	Meade St	Pacific St	Commercial St	191,250
	Subtotal			1,877,850
Transmission - New	Edgewood Dr (CTH JJ)	French Rd	Cherryvale Dr	365,100
	Subtotal			365,100
Total Water Main Construction				\$ 2,717,482

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
WATERMAIN CONSTRUCTION CAPITAL IMPROVEMENT PROGRAM**

2022	Street	From	To	Water Utility	TIF 11	Total Cost
Labor Pool				266,082		266,082
CEA				10,000		10,000
Miscellaneous	Permit; Misc.Fees; Training; Testing Mat'l			10,000		10,000
Construction	Surface Restoration			44,050		44,050
	Subtotal			54,050		54,050
New Construction	Lightning Dr	Edgewood Dr	Providence Ave	494,800		494,800
	Spartan Dr	Haymeadow Ave	Meade St	195,000		195,000
	Subtotal			689,800		689,800
Reconstruction (not related to paving)	Subtotal			-	-	-
Reconstruction (prior to next year's paving)	Alice St	Drew St	Union St	81,000		81,000
	Atlantic St	Richmond St (STH 47)	Oneida St	415,550		415,550
	Badger Ave	Spencer St	Pierce Ave	219,650		219,650
	Badger Ave	Washington St	Mason St	252,030		252,030
	Bartell Dr	Prospect Ave	Pine St	234,350		234,350
	Division St - partial only	Lindbergh St	Michigan St	36,900		36,900
	Eisenhower Dr	Future Rd "G"	Midway Rd	9,100		9,100
	Fourth St	Outagamie St	Mason St	31,200		31,200
	Fourth St	Story St	Memorial Dr	191,410		191,410
	Gillett St - partial only	Marquette St	Lindbergh St	83,525		83,525
	Goodall St	Lowe St	Carpenter St	138,300		138,300
	Lindbergh St - partial only	Erb St	Appleton St	32,800		32,800
	Locust St	College Ave	Washington St	-	19,060	19,060
	Locust St	Washington St	Franklin St	-	57,000	57,000
	Marquette St - partial only	Mason St	Richmond St	376,000		376,000
	Michigan St - partial only	Division St	Appleton St	12,375		12,375
	Midway Rd	Eisenhower Dr	Eisenhower Dr	24,300		24,300
	Pershing St - partial only	Morrison St	Meade St	31,550		31,550
	S Island St - BRIDGE	over power canal	Vulcan St	97,000		97,000
	Summer St	Richmond St	Oneida St	407,450		407,450
	Summit St	Prospect Ave	Fourth St	98,200		98,200
	Washington St	Bennett St	Richmond St	-	84,000	84,000
	Subtotal			2,772,690	160,060	2,932,750
Transmission - New	Subtotal			-	-	-
Total Water Main Construction				\$ 3,792,622	\$ 160,060	\$ 3,952,682

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
WATERMAIN CONSTRUCTION CAPITAL IMPROVEMENT PROGRAM**

2023	Street	From	To	Water Utility	TIF 11	Total Cost
Labor Pool				266,082		266,082
CEA				10,000		10,000
Miscellaneous	Permit; Misc.Fees; Training; Testing Mat'l			10,000		10,000
Construction	Surface Restoration			18,150		18,150
	Subtotal			28,150	-	28,150
New Construction	Easement	Rebecca Ct	Weimar Ct	35,165		35,165
	Easement (Kamps Ave)	Mason St	Summit St (620' w/o)	30,250		30,250
	Easement (s/o CN Rail)	Parkins St	Driscoll St	42,110		42,110
	Subtotal			107,525	-	107,525
Reconstruction (not related to paving)	Cloverdale Dr	Linwood Ave	Elinor St	364,900		364,900
	College Ave	Matthias St	Kensington Dr	144,375		144,375
	Kensington Dr	650' n/o Warehouse Rd	College Ave	238,100		238,100
	Summit St	Packard St	Elsie St	57,640		57,640
	Walden Ave	John St	Dewey St	37,000		37,000
	Subtotal			842,015	-	842,015
Reconstruction (prior to next year's paving)	Alexander St - partial only	Melrose St	Marquette St	143,210		143,210
	Beil Avenue	Summit St	Richmond St	40,300		40,300
	Dewey St - partial only	Kernan Ave	Walden Ave	38,925		38,925
	Driscoll St	Prospect Ave	WI Central RR	194,950		194,950
	Durkee St	College Ave	Washington St	-	58,000	58,000
	Durkee St	Lawrence St	College Ave	-	127,500	127,500
	Glendale Ave	Meade St	Ballard Rd	796,400		796,400
	Helen St - partial only	Pauline St	Glendale Ave	17,470		17,470
	Jardin St - partial only	Leminwah St	Plateau St, east of	97,675		97,675
	Lawe St	College Ave	Spring St	656,300		656,300
	Lawrence St	Morrison St	Durkee St	-	85,925	85,925
	Marion St - partial only	Walden Ave	Telulah Ave	9,820		9,820
	Morrison St	College Ave	Washington St	-	112,475	112,475
	Morrison St	Glendale Ave	Parshing St	143,150		143,150
	Oklahoma St	Mason St	Richmond St	423,345		423,345
	Plateau St - partial only	Jardin St	Wisconsin Ave	57,475		57,475
	Rankin St	College Ave	Afton St	87,875		87,875
	Tracy St - partial only	Walden Ave	Telulah Ave	1,200		1,200
	Subtotal			2,708,095	363,900	3,071,995
Transmission - New						-
	Subtotal			-	-	-
Total Water Main Construction				\$ 3,961,867	\$ 363,900	\$ 4,325,767

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: Sanitary Sewer Program

PROJECT DESCRIPTION

Justification:

The following is a summary of costs associated with replacing and adding sanitary sewers. A five year plan detailing this and future years' projects follows this summary.

Discussion of operating cost impact:

Reconstruction is performed based upon the existing condition and expected useful remaining life of the sanitary sewer. However, budget constraints limit the number of sewers which can be reconstructed annually to an amount less than that which actually meets the criteria for reconstruction.

Typically, less than 1% of our sewers are reconstructed on an annual basis. This fact, coupled with new sewers added annually to the system results in no overall reduction in our City-wide sewer maintenance costs.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE	2019	2020	2021	2022	2023	Total
Wastewater Reconstruction Wastewater Utility	4,383,182	5,353,880	4,045,747	2,483,557	3,501,345	\$ 19,767,711
Wastewater Construction TIF # 11	91,025	-	-	-	-	\$ 91,025
Total - Sanitary Sewer Program	\$ 4,474,207	\$ 5,353,880	\$ 4,045,747	\$ 2,483,557	\$ 3,501,345	\$ 19,858,736

COST ANALYSIS

Estimated Cash Flows

Components	2019	2020	2021	2022	2023	Total
Planning	-	-	-	-	-	\$ -
Land Acquisition	-	-	-	-	-	\$ -
Construction	4,303,050	5,159,230	3,851,097	2,288,907	3,306,695	\$ 18,908,979
Other	171,157	194,650	194,650	194,650	194,650	\$ 949,757
Total	\$ 4,474,207	\$ 5,353,880	\$ 4,045,747	\$ 2,483,557	\$ 3,501,345	\$ 19,858,736
Operating Cost Impact	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
SANITARY SEWER CAPITAL CONSTRUCTION PROGRAM**

2019	Street	From	To	Waste-water Utility	TIF # 11	Total Cost
Labor Pool				163,757		163,757
CEA				7,400		7,400
Miscellaneous Construction	Sanitary Laterals & Manholes Prior To 2019 Asphalt Paving			66,270		66,270
	Sanitary Laterals & Manholes Prior To 2019 Concrete Paving			32,550		32,550
	Structure Rehabilitation / Sewer Cut repairs from 2018			40,000		40,000
	Subtotal			138,820		138,820
New Construction	Edgewood Dr (CTH JJ)	Lightring Dr	French Rd	548,000		548,000
	Apple Ridge Liftstation & Forcemain			230,880		230,880
	North Edgewood Estates Liftstation & Forcemain			643,500		643,500
	Sommers Dr	Spartan Ave, 100' s/o	Spartan Ave, 400' n/o	87,500		87,500
	Spartan Ave	e/o Haymeadow Ave	Meade St	124,400		124,400
	Subtotal			1,634,280		1,634,280
Reconstruction	Fremont St (liner)	East St	Harmon St	13,500		13,500
	Fremont St (liner)	Kernan Ave, 666' w	Kernan Ave, 334' w	30,590		30,590
	Vulcan St (liner)	South Island St	South Island St, 307' n	48,230		48,230
	Subtotal			92,320		92,320
Reconstruction (on streets to be paved in 2020)	Appleton St	Lawrence St	College Ave	-	59,000	59,000
	Carpenter St	Calumet St	Taft Ave	341,500		341,500
	Carpenter St	Fremont St	Calumet St	334,900		334,900
	Erb St	Michigan St	Michigan St, 130' n/o	20,625		20,625
	Harriet St	Walter Ave	Telulah Ave	77,575		77,575
	Henry St	Werner St	Telulah Ave	90,025		90,025
	Morrison St	Hancock St	Wisconsin Ave	76,600		76,600
	Opechee St	Leminwah St	w/o	46,350		46,350
	Opechee St	Leminwah St	Owaisa St	6,250		6,250
	Prospect Ave	Bartell Dr	Haskell St	398,455		398,455
	Prospect Ave (CTH BB)	Seminole Dr	Bartell Dr	220,950		220,950
	Randall St	Oneida St	Meade St	507,525		507,525
	Rocky Bleier Run	Water St	park	-	32,025	32,025
	Warner St	College Ave	Henry St	36,250		36,250
	Winnebago St	Division St	Drew St	189,600		189,600
	Subtotal			2,346,605	91,025	2,437,630
Total				\$ 4,383,182	\$ 91,025	\$ 4,474,207

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
SANITARY SEWER CAPITAL CONSTRUCTION PROGRAM**

2020	Street	From	To	Waste-water Utility
Labor Pool				189,650
CEA				5,000
Miscellaneous Construction	Sanitary Laterals & Manholes Prior To 2020 Asphalt Paving (B-20)			41,034
	Sanitary Laterals & Manholes Prior To 2020 Concrete Paving (A-20)			23,761
	Structure Rehabilitation / Sewer Cut repairs from 2019 (E-20)			40,000
	Subtotal			104,795
New Construction	Apple Hill Farms force main	French Rd lift station	Apple Hill Blvd	96,000
	Apple Hill Farms lift station on French Road, 1450' n/o Applecreek Road			750,000
	Subtotal			846,000
Reconstruction	Pierce Park (liner)			332,310
	Subtotal			332,310
Reconstruction (on streets to be paved in 2021)	Douglas St	Reid Dr	Prospect Ave	162,775
	Glendale Ave	Mason St	Richmond St	706,575
	Harris St	Badger Ave	Richmond St	515,450
	Jackson St	Calumet St	Fremont St	544,425
	Lawrence St	Oneida St	Morrison St	15,900
	Madison St	Calumet St	Taft Ave	79,000
	Minor St	Meade St	Rankin St	63,700
	Morrison St	Lawrence St, s/o	College Ave	20,175
	Newberry St	Schaefer St	city limits	655,250
	Oneida St	Lawrence St	College Ave	21,800
	Summer St	Gillett St	Story St	692,775
	Summer St	Story St	Richmond St	398,300
	Subtotal			3,876,125
Total				\$ 5,353,880

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
SANITARY SEWER CAPITAL CONSTRUCTION PROGRAM**

2021	Street	From	To	Waste-water Utility
Labor Pool				189,650
CEA				5,000
Miscellaneous	Sanitary Laterals & Manholes Prior To 2021 Asphalt Paving (B-21)			32,811
Construction	Sanitary Laterals & Manholes Prior To 2021 Concrete Paving (A-21)			50,116
	Structure Rehabilitation / Sewer Cut repairs from 2020 (E-21)			25,000
	Subtotal			107,927
New Construction	Spartan Dr (by private developer) Haymeadow Ave 900' e/o property line			101,700
	Lawe St - South Island St force main river crossing replacement or liner			700,000
	Subtotal			801,700
Reconstruction	Subtotal			-
Reconstruction (on streets to be paved in 2022)	Alvin St	Wisconsin Ave	Marquette St	693,950
	Appleton St	College Ave	Atlantic St	195,925
	Atlantic St	Oneida St	Lawe St	265,500
	Douglas St	Badger Ave	Wisconsin Ave	215,630
	Elsie St	Mason St	Richmond St	527,895
	Linwood Ave	College Ave	Summer Ave	457,550
	Meade St	Pacific St	Commercial St	130,575
	Morrison St	Wisconsin Ave	Glendale Ave	454,445
	Subtotal			2,941,470
Total				\$ 4,045,747

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
SANITARY SEWER CAPITAL CONSTRUCTION PROGRAM**

2022	Street	From	To	Waste-water Utility
Labor Pool				189,650
CEA				5,000
Miscellaneous Construction	Sanitary Manhole adjustments and seals Prior To 2022 Asphalt Paving (B-22)			33,600
	Sanitary Manhole adjustments and seals Prior To 2022 Concrete Paving (A-22)			59,832
	Structure Rehabilitation / Sewer Cut repairs from 2021 (E-22)			25,000
	Subtotal			118,432
New Construction	Spartan Dr	Haymeadow Ave, 900' e/o, property line to Meade S		209,050
	Subtotal			209,050
Reconstruction	Subtotal			-
Reconstruction (on streets to be paved in 2023)	Alice St	Drew St	Union St	85,725
	Atlantic St	Richmond St (STH 47)	Oneida St	355,050
	Badger Ave	Spencer St	Pierce Ave	162,000
	Badger Ave	Washington St	Mason St	189,000
	Bartell Dr	Prospect Ave	Pine St	149,715
	Bates St	Dunlap St	Pacific St	33,345
	Dunlap St	Bates St	Pacific St	29,025
	Fourth St	Outagamie St	Mason St	94,500
	Fourth St	Story St	Memorial Dr	188,325
	Locust St	College Ave	Washington St	39,200
	Locust St	Washington St	Franklin St	66,500
	Summer St	Richmond St	Oneida St	352,080
	Summit St	Prospect Ave	Fourth St	99,360
	Washington St	Bennett St	Richmond St	117,600
	Subtotal			1,961,425
Total				\$ 2,483,557

**CITY OF APPLETON 2019 BUDGET
DEPARTMENT OF PUBLIC WORKS
SANITARY SEWER CAPITAL CONSTRUCTION PROGRAM**

2023	Street	From	To	Waste-water Utility
Labor Pool				189,650
CEA				5,000
				-
Miscellaneous Construction	Sanitary Manhole adjustments and seals Prior To 2022 Asphalt Paving (B-22)			48,309
	Sanitary Manhole adjustments and seals Prior To 2022 Concrete Paving (A-22)			47,850
	Structure Rehabilitation / Sewer Cut repairs from 2021 (E-22)			25,000
	Subtotal			121,159
New Construction	Subtotal			-
Reconstruction	Subtotal			-
Reconstruction (on streets to be paved in 2024)				-
	Bell Avenue	Summit St	Richmond St	238,140
	Driscoll St	Prospect Ave	WI Central RR	184,680
	Durkee St	College Ave	Washington St	49,000
	Durkee St	Lawrence St	College Ave	49,000
	Glendale Ave	Meade St	Ballard Rd	733,050
	Glendale Ave	Roemer Rd	Sandra St	392,985
	Lawe St	College Ave	Spring St	165,836
	Lawrence St	Morrison St	Durkee St	63,000
	Morrison St	College Ave	Washington St	49,000
	Morrison St	Glendale Ave	Pershing St	194,130
	Oklahoma St	Mason St	Richmond St	356,265
	Outagamie St	College Ave	Packard St	197,100
	Owalissa St	Opechee St	Pacific St	356,265
	Rankin St	College Ave	Alton St	68,120
	Summit St	Packard St	Elsie St	88,965
	Subtotal			3,185,536
Total				\$ 3,501,345

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: Second Raw Water Line

PROJECT DESCRIPTION

Justification:

The Appleton Water Treatment Facility (AWTF) serves the citizens of Appleton and wholesale customers in Grand Chute, Sherwood, and the Waverly Sanitary District. The AWTF draws raw water from Lake Winnebago through preliminary treatment at the raw water lake station. Once treated, the raw water is pumped to the AWTF via a 42" pipe line for further treatment. The intent of this project is to create reliability and redundancy in the raw water processing areas where there is a need or lack of redundancy.

The existing lake intake consists of a single four foot diameter pipe with two bell intakes. The intakes' configuration and building materials are prone to icing events that stop raw water. The lake station traveling screen removes large objects from the raw water intake such as logs, fish, and other debris. These materials are screened out of the water so they do not enter and damage the low lift pumps that pump water to the AWTF. The current screen has reached its useful life and is in need of a replacement. This project will provide a second raw water pipe, replacement screen, and a screenings conveyance system for the wastes to be collected. New screening technologies allow for greater removals of contaminants.

This project includes the construction of a second raw water pipe line from the lake station to the AWTF. The current single raw water pipe runs to the plant over approximately one mile from the lake station to the plant via a circa 1960's 42 inch raw water pipe. There is insufficient space for a second raw water pipe in the current route along Oneida Street. A 2018 study will provide recommendations for land procurement, easements, and permits where necessary to support the future second raw water pipe line construction in 2020.

This project will also explore a treated water interconnection with the City of Menasha and/or Village of Fox Crossing. The City has had discussions with the City of Menasha and Village of Fox Crossing regarding potential interconnections to provide additional supply and redundancy when and if needed. In addition, the State Department of Natural Resources has recommended that Appleton pursue an emergency finished water interconnection. One potential option is an interconnection with the Village of Fox Crossing at a location along Oneida Street where the water mains of the Village are in close proximity to Appleton's.

The indirect cost of losing the ability to serve its customers could involve liability claims against the City and all costs associated with failure to produce water. This project consists of conducting a pre-engineering study of the alternatives in 2018 that includes development of a firm estimate of construction costs. Construction of a second feeder line or City of Menasha interconnection will bring redundancy to the water treatment plant.

Discussion of operating cost impact:

There is no operating cost increase to this project and the potential to avoid liability claims for loss of service.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE		2019	2020	2021	2022	2023	Total
Water Utility	Engineering	1,400,000	-	-	-	-	\$ 1,400,000
	Construction	-	7,585,000	-	-	-	\$ 7,585,000
Total - Water Utility Capital Projects		\$ 1,400,000	\$ 7,585,000	\$ -	\$ -	\$ -	\$ 8,985,000

COST ANALYSIS

Estimated Cash Flows

Components	2019	2020	2021	2022	2023	Total
Planning	1,400,000	-	-	-	-	\$ 1,400,000
Land Acquisition	-	-	-	-	-	\$ -
Construction	-	7,585,000	-	-	-	\$ 7,585,000
Other	-	-	-	-	-	\$ -
Total	\$ 1,400,000	\$ 7,585,000	\$ -	\$ -	\$ -	\$ 8,985,000
Operating Cost Impact	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: Water Treatment Chemical Storage

PROJECT DESCRIPTION

Justification:

The Appleton Water Treatment Facility (AWTF) utilizes a group of specifically approved chemicals as part of the drinking water treatment process. Each chemical is intended to perform a unique purpose within the water treatment train. The AWTF existing chemical storage room was designed as part of original plant construction in 2001 for the intended purpose of supporting the regulatory approved treatment processes and associated components within.

The AWTF received formal regulatory authorization effective July 1, 2017 to permanently navigate from ultra filtration membranes following the completion of the Regulatory Upgrade and Process Improvements Project (RUIP). The successful transition to high density lime feeders, conventional filters, ultraviolet light (UV) reactors, and upgraded disinfection processes now allow the AWTF to make decisions regarding ultra filtration membrane equipment and associated processes (e.g. abandonment, repurposing, and space utilization). The AWTF initiated Phase I of this CIP in 2018 following a preliminary engineering study that identified a plan for upgrading or modifying various chemical systems. Evidence of chemical deterioration has been observed as the age of some of the critical storage (e.g. fiberglass tanks) and conveyance components (e.g. PVC pipe) has approached or exceeded the normally expected life (e.g. 10-15 years). The report was the basis to develop a priority strategy based on system condition, criticality to treatment, and costs. Phase I systems selected for construction during 2018 included sodium hypochlorite, fluoride, ferric sulfate, polymer, and carbon dioxide (meters). Phase II Chemical Treatment and Storage Project includes the balance of systems from the preliminary report: aluminum chlorohydrate (ACH), polyphosphate, and finished water pH control.

Discussion of operating cost impact:

This project will decrease staff labor and associated equipment maintenance related to this equipment, enabling staff to attend to other critical maintenance duties. The primary impact is expected to be a reduction of overtime expense.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE		2019	2020	2021	2022	2023	Total
Water	Equipment	-	475,000	-	-	-	\$ 475,000
Total - Water Treatment Capital Projects		\$ -	\$ 475,000	\$ -	\$ -	\$ -	\$ 475,000

COST ANALYSIS

Estimated Cash Flows

Components	2019	2020	2021	2022	2023	Total
Planning	-	-	-	-	-	-
Land Acquisition	-	-	-	-	-	-
Construction	-	-	-	-	-	-
Other	-	475,000	-	-	-	475,000
Total	\$ -	\$ 475,000	\$ -	\$ -	\$ -	\$ 475,000
Operating Cost Impact	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: TMDL Related Facility Planning

PROJECT DESCRIPTION

Justification:

On May 18, 2012, the US Environmental Protection Agency (EPA) approved the lower Fox River basin and Green Bay area of concern Total Maximum Daily Load (TMDL). The TMDL outlines phosphorus and sediment reductions needed to restore water quality in the local waterways, lower Fox River and bay of Green Bay. As a result, revisions to NR 217 regulations will lower effluent limits for phosphorus discharges of the Appleton Wastewater Treatment Plant (AWWTP). The Wisconsin Department of Natural Resources (WDNR) implements point source load allocations through permits issued under the Wisconsin Pollutant Discharge Elimination System (WPDES) program. Under the approved TMDL, the WDNR established wastewater effluent limits of 0.2 mg/l or less for point sources with WPDES permits on the lower Fox River. This limit is substantially lower than the AWWTP's current 1.0 mg/l phosphorus limit. The current treatment plant processes were not designed to remove phosphorus to these new lower limits.

Professional engineering work initiated in the fall of 2013 and completed in late 2015 evaluated existing treatment capabilities at the AWWTP and process optimization opportunities. The study also evaluated new treatment plant improvements that would facilitate regulatory compliance with low-level phosphorus standards. Water Quality Trading (WQT), and/or Adaptive Management (AM) were included within the evaluation as off-site alternative methods for regulatory compliance. The final technical document delivered by the engineer summarized the suite of compliance options including pairing alternatives that would provide the most cost effective path(s) for regulatory compliance. The projected total 20-year present worth cost for compliance could exceed \$20 million depending on the alternative(s) chosen and its success in ultimately achieving future low-level phosphorus limits.

The AWWTP was reissued a WPDES permit with an effective start date of April 1, 2017. This reissued 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 TMDL legislation. The AWWTP has continued to build from the recommendations outlined within the 2015 engineering study which includes the implementation and refinement of automated phosphorus chemical treatment control, use of additional online phosphorus analyzers, targeted phosphorus source reduction, and other facets of treatment optimization. In parallel with ongoing on-site treatment evaluation studies, the Appleton Wastewater Utility will continue to explore AM and WQT opportunities to build experience of how these compliance options may function. The aforementioned information was used as the basis for future capital planning starting in 2021.

\$250,000 has been designated in 2021 for preliminary engineering and design services. Progress meeting the TMDL limit prior to 2021 will dictate the path and scope of work while adhering to the action plan outlined in Section 5.2 of the AWWTP WPDES permit.

Discussion of operating cost impact:

Non-compliance could result in regulatory fines, a compliance schedule and / or a moratorium on development. Operating impacts will have costs associated with them when the regulatory standards and associated treatment improvements are established in years following the Facilities Study.

DEPARTMENT PHASE	2019	2020	2021	2022	2023	Total
Wastewater Design	-	-	250,000	-	-	\$ 250,000
Total - Wastewater Capital Projects	\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ 250,000

COST ANALYSIS

Estimated Cash Flows						
Components	2019	2020	2021	2022	2023	Total
Planning	-	-	250,000	-	-	\$ 250,000
Land Acquisition	-	-	-	-	-	\$ -
Construction	-	-	-	#REF!	#REF!	#REF!
Other - Equipment	-	-	-	-	-	\$ -
Total	\$ -	\$ -	\$ 250,000	#REF!	#REF!	#REF!
Operating Cost Impact	N/Q *	N/Q *	N/Q *	N/Q *	N/Q *	N/Q *

* N/Q = Not Quantifiable

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: Wastewater Sludge Storage Options

PROJECT DESCRIPTION

Justification:

Wastewater plant biosolids storage deficiencies have occurred over the past several years. This deficiency has triggered the need for Appleton City Council resolutions to investigate options to address the deficiency and comply with the 180 day biosolids storage requirement under code NR 204. More recently the Wisconsin Department of Natural Resources has proposed more stringent agricultural nutrient management standards for land on which biosolids are applied. These new standards could have significant implications to municipal biosolids management programs. Each of the aforementioned have caused the Utility to consider various treatment options that could provide cost effective storage options and end-use diversification for AWWTP biosolids. Composting was evaluated because it alters Appleton wastewater biosolids classification under NR 204 from a Class-B to a Class-A material. Successful composting also reduces onsite storage needs and allows the wastewater facility to meet the 180-day storage requirement while generating a product that is appealing to a number of markets including residents, nurseries, and commercial landscapers. The composting provides greater flexibility in scheduling land application of Class B biosolids by maximizing available storage which reduces costs.

Since 2008, the Appleton Department of Public Works and Wastewater Utility have worked with the Outagamie County Solid Waste Department to seek cooperative solutions to AWWTP biosolids, curbside leaf / yard waste materials, and landfill cover needs. The Utility received authorization from Common Council in 2009 to begin the engineering phase of a large-scale compost pilot project at the Outagamie County Landfill. A compost facility plan was developed and approved by the DNR which provided operational guidelines to demonstrate the feasibility and assess costs for a cooperative composting operation. Compost pad construction was completed in September 2010. Since the pad construction, approximately 80,000 cubic yards of compost material has been processed as part of 12 individual batches. On April 1, 2017, the Biosolids Composting Facility was permitted as part of the AWWTP's Wisconsin Pollutant Discharge Elimination System (WPDES) permit.

In 2018, the AWWTP contracted with Coker Composting and Consulting to evaluate the transition into either full scale biosolids composting, increased onsite biosolids storage, or some combination of the two. The preliminary opinion of costs for a sludge storage building expansion that would meet future 180-day storage totaled \$7.4 M. Capital costs for three alternative compost options ranged from \$8 M to \$12.3 M. Decisions regarding the future direction (compost or sludge storage) are expected to be known in 2019 which could impact the suggested project timeline listed below.

Discussion of operating cost impact:

Since 2013, costs related to composting have been included in the biosolids O&M budget. O&M costs for continued land application of biosolids will closely follow cost increases in fuel and viable application sites. Significant program cost increases would be expected if limitations to on-site sludge storage required landfilling during a period when traditional land application is not feasible. The compost option eliminates that need by providing additional 180-day storage capacity. Developing compost markets may provide the ability to offset future operational costs through bulk compost sales.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE	2019	2020	2021	2022	2023	Total
Wastewater & Land	-	500,000	-	-	-	\$ 500,000
Facilities Engineering	750,000	-	-	-	-	\$ 750,000
Construction	-	8,000,000	-	-	-	\$ 8,000,000
Total - Wastewater Capital Projects	\$ 750,000	\$ 8,500,000	\$ -	\$ -	\$ -	\$ 9,250,000

COST ANALYSIS

Components	Estimated Cash Flows					Total
	2019	2020	2021	2022	2023	
Land Acquisition	-	500,000	-	-	-	\$ 500,000
Engineering	750,000	-	-	-	-	\$ 750,000
Construction	-	8,000,000	-	-	-	\$ 8,000,000
Other	-	-	-	-	-	-
Total	\$ 750,000	\$ 8,500,000	\$ -	\$ -	\$ -	\$ 9,250,000
Operating Cost Impact	NQ *	NQ *	NQ *	NQ *	NQ *	\$ -

* N/Q = Not Quantifiable

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: 1 Ton Dump Truck

PROJECT DESCRIPTION

Justification:

This new truck would primarily be utilized by the stormwater facility maintenance crew. This crew is responsible for various maintenance projects associated with over 50 stormwater facilities (not including ditches and ravines) and this number continues to grow every year. They excavate sediment, repair outfalls, remove unwanted vegetation and perform post-storm debris removal to ensure water is flowing properly.

Currently, the stormwater crew does not have a permanent vehicle in its fleet. Therefore, the 2 full time stormwater crew members and their assistants (2-4 other employees) all work out of one seasonal pickup truck. Having a permanent truck in the stormwater fleet, in addition to the seasonal pickup truck, will not only provide adequate space for all of their equipment, but also offer the ability to split up and work at separate job sites when needed.

In addition to the transportation efficiencies this truck would provide, it will also be built with stormwater facility maintenance in mind. It will have a nine foot dump box for hauling dirt, stone and other materials to the job site as well as for hauling pond sediment, debris and vegetation from the stormwater facilities. In addition, this truck will be four wheel drive with a 14,000 pound GVWR which will allow it to haul more material, provide better traction and have a higher towing capacity than a standard pickup truck.

Discussion of operating cost impact:

Ongoing costs (fuel, maintenance, CEA replacement, etc.)

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE		2019	2020	2021	2022	2023	Total
Stormwater	Equipment	60,000	-	-	-	-	\$ 60,000
Total - Public Works Capital Projects Fund		\$ 60,000	\$ -	\$ -	\$ -	\$ -	\$ 60,000

COST ANALYSIS

Estimated Cash Flows

Components	2019	2020	2021	2022	2023	Total
Planning	-	-	-	-	-	\$ -
Land Acquisition	-	-	-	-	-	\$ -
Construction	-	-	-	-	-	\$ -
Other	60,000	-	-	-	-	\$ 60,000
Total	\$ 60,000	\$ -	\$ -	\$ -	\$ -	\$ 60,000
Operating Cost Impact	\$ 7,200	\$ 7,200	\$ 7,200	\$ 7,200	\$ 7,200	\$ 36,000

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: DPW Equipment - Sweeper Replacement

PROJECT DESCRIPTION

Justification:

High Efficiency Sweeper Upgrade - Changing part of the fleet over from mechanical sweepers to vacuum sweepers at the time of their scheduled replacement will help the City to continue with proper stormwater management practices and make progress in the reduction of nonpoint source pollution. The Citywide Stormwater Management Plan (SWMP), updated in 2014, indicates the City will continue to investigate possible upgrades to its sweeper program for innovations in program practices and technology. A sweeper upgrade from mechanical to high efficiency is shown in 2022, per the Citywide SWMP Implementation Plan.

Discussion of operating cost impact:

Since the purchase price of a vacuum sweeper is higher than that of a conventional mechanical sweeper, the annual amortized replacement cost, charged as an operating expense, will also be somewhat higher. Frequency of repair and efficiency of operation are unknown at this time but will be evaluated prior to replacing the next mechanical sweeper.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE	2019	2020	2021	2022	2023	Total
Stormwater Sweeper	-	-	-	70,000	-	\$ 70,000
Total - Stormwater Capital Projects	\$ -	\$ -	\$ -	\$ 70,000	\$ -	\$ 70,000

COST ANALYSIS

Components	Estimated Cash Flows					Total
	2019	2020	2021	2022	2023	
Planning	-	-	-	-	-	\$ -
Land Acquisition	-	-	-	-	-	\$ -
Construction	-	-	-	-	-	\$ -
Other	-	-	-	70,000	-	\$ 70,000
Total	\$ -	\$ -	\$ -	\$ 70,000	\$ -	\$ 70,000
Operating Cost Impact	NQ *	NQ *	NQ *	NQ *	NQ *	\$ -

* NQ = Not Quantifiable

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: Water Tower Improvements

PROJECT DESCRIPTION

Justification:

The City of Appleton's one million gallon (1 MG) Matthias Street water tower is located in the southeastern portion of the City of Appleton. When the tower was first constructed in 1988, it was near the periphery of the City's distribution system; far from the Water Treatment Facility's high lift pump station. Due to the tower's close proximity to the Water Treatment Facility, the energy grade line in the distribution system is almost always above the overflow elevation in the tower. As a result, the tower has very little turnover. To improve system operation and to give greater flexibility to create turnover in the Matthias Street tower, the City will install a booster pump station. The pump is used to intentionally pump water out of the tower and into the distribution system. When the pump is shut-off, the tower refills under normal system pressure. The pump and altitude valve are controllable via radio telemetry from the Water Treatment Facility. The actual capacity of the booster pumps will meet the hydraulic and fire flow needs of the system.

Discussion of operating cost impact:

There could be a reduction in energy costs as the pumps will be controlled with variable frequency drives. The exact energy savings, if any, would not be known until specific pumping information is calculated at the time of the project.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE	2019	2020	2021	2022	2023	Total
Water Matthias Tower	-	-	\$ 320,000	-	-	\$ 320,000
Total - Water Treatment Capital Projects	\$ -	\$ -	\$ 320,000	\$ -	\$ -	\$ 320,000

COST ANALYSIS

Components	Estimated Cash Flows					Total
	2019	2020	2021	2022	2023	
Planning	-	-	45,000	-	-	\$ 45,000
Land Acquisition	-	-	-	-	-	\$ -
Construction	-	-	275,000	-	-	\$ 275,000
Other	-	-	-	-	-	\$ -
Total	\$ -	\$ -	\$ 320,000	\$ -	\$ -	\$ 320,000
Operating Cost Impact	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: Water Treatment Instrument Improvements

PROJECT DESCRIPTION

Justification:

Water treatment process control decisions come from operators and a variety of field instruments. The key function for most instruments deployed at the Water Plant is to decrease the time it takes to respond to changing raw water quality characteristics. Over time instruments become less productive or a newer version with improved response and resolution becomes the industry standard. Overall, these systems are essential in maintaining plant operations within State of Wisconsin and federal regulatory limits. As such, this project is intended to replace/upgrade the following instrumentation:

Ten (10) turbidimeters and associated controllers deploying LED technology for each of the GAC filters and for finished water monitoring.

Six (6) reagentless chlorine residual analyzers for the chlorine disinfection process and/or finished water monitoring.

Six (6) pressure data-loggers for selected use throughout water utility facilities. These instruments are battery-operated, stand-alone pressure recorders that can accurately measure pressure transients at a selected location. When used in conjunction with other stationary pressure-monitoring equipment, distribution system dynamics associated with main breaks or other events can be more thoroughly evaluated and mitigated.

Discussion of operating cost impact:

Reagentless analyzers have a lower operating cost due to reduction in the cost of reagents which must be continuously replenished.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE	2019	2020	2021	2022	2023	Total
Water Equipment	-	-	-	100,000	-	\$ 100,000
Total - Water Treatment Capital Projects	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000

COST ANALYSIS

Components	Estimated Cash Flows					Total
	2019	2020	2021	2022	2023	
Planning	-	-	-	-	-	\$ -
Land Acquisition	-	-	-	-	-	\$ -
Construction	-	-	-	-	-	\$ -
Other	-	-	-	100,000	-	\$ 100,000
Total	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000
Operating Cost Impact	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: Wastewater Belt Filter Press Upgrades

PROJECT DESCRIPTION

Justification:

The AWWTP utilizes three Ashbrook Simon Hartley Winkle presses (Type 84 Size 3 / 2.0 meter) or belt filter presses (BFPs) to dewater anaerobically digested sludge. Each BFP has run times in excess of 4,000 hours per year. BFP solids production rates have increased 25% since 2012 to over 25,000 wet tons annually. This trend follows the increased loadings from local industry and hauled waste customers. The increase in solids production justifies the purchase of additional BFPs including various upgrades to aging existing equipment that has reached its useful life.

Over the past 25 years these BFPs have provided effective mechanical dewatering with minimal overall maintenance. These units were installed in the 1990's and were reconditioned in the late 2000's. The reconditioning work was completed by original equipment manufacturer (OEM) and focused on mechanical and structural component deficiencies which resulted from accumulated wear after over 20 years of continuous operation. The reconditioning work completed was not intended to go beyond the priority repairs identified at that time but targeted components which had reached their useful life at that time. Therefore, the original functioning electrical hard wire relays remained untouched and are still in use today. However, these existing relays do not provide the diverse functional capabilities offered with current technologies. This includes the ability to fully integrate BFP unit processes with the existing supervisory control and data acquisition (SCADA) computer operating system. To accomplish this, the existing hard wire relay system will require replacement by a programmable logic controller (PLC) and new relay modules.

Since the original installation of the BFPs, there have been unit processes that have become obsolete (e.g. lime pasteurization process phased out by anaerobic digestion as part of 1994 plant upgrades), including improvements to the solids dewatering polymer batch system. These former treatment processes and ancillary chemical feed systems continue to share common space within existing electrical control panels. This CIP is intended to address unused electrical wiring and components from past improvements and upgrades which remain within the existing BFP control cabinets.

This CIP is segregated into three phases starting with Phase 1 Preliminary Engineering, followed by Phase 2 Belt Filter Press Additions, and Phase 3 Existing Belt Filter Press Upgrades. Phase 1 services will provide observations, data, alternatives, costs, conclusions, and recommendations that will be used to shape the subsequent two project phases. Phase 2 in 2020 currently includes the estimated costs for the addition of two new BFPs. The addition of two new fully operational BFPs would facilitate Phase 3 work in 2021. This includes existing BFP work to address remnant hard wiring associated from obsolete equipment and processes while simultaneously upgrading the outdated hard wire relays with PLC technology. It is also intended to upgrade antiquated and degraded components outside the electrical hard wire systems which include:

- Replace and relocate existing manual control panels which have degraded internal electrical components;
- Install Human-Machine Interface (HMI) operator touchscreens;
- Upgrades to the existing polymer batch and pump system;
- Replace existing Modicon Quantum Processor with Modicon Unity Processor and convert Concept program to Unity Pro XL

Discussion of operating cost impact:

Facilitating increased solids production and expanded functionality will aid in decreasing associated dewatering operational costs through improvements to reliability, reduced chemical feed use, and reduced equipment maintenance.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE		2019	2020	2021	2022	2023	Total
Wastewater	Engineering	-	-	-	400,000	-	\$ 400,000
	Contractor Fees	-	-	-	1,600,000	2,000,000	\$ 3,600,000
Total - Wastewater Utility Capital Projects		\$ -	\$ -	\$ -	\$ 2,000,000	\$ 2,000,000	\$ 4,000,000

COST ANALYSIS

Components	Estimated Cash Flows					
	2019	2020	2021	2022	2023	Total
Planning	-	-	-	400,000	-	\$ 400,000
Land Acquisition	-	-	-	-	-	\$ -
Construction	-	-	-	1,600,000	2,000,000	\$ 3,600,000
Other	-	-	-	-	-	\$ -
Total	\$ -	\$ -	\$ -	\$ 2,000,000	\$ 2,000,000	\$ 4,000,000
Operating Cost Impact	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION
Project Title: Compressor Replacement

PROJECT DESCRIPTION

Justification:

The Wastewater Treatment Plant (AWWTP) utilizes compressed air for processes, instrument, and general use (e.g. tools). The plant air compressors at the AWWTP have been in place longer (>20 years) and have reached their useful life. Consideration has been given to utilizing the future replacements to the 1978 Ingersoll-Rand units located in B-Building basement as the primary source of plant air. This would be a deviation from the current mode of operation which relies upon the GA-15 Atlas Copco units located in V-Building basement as the primary source of plant air.

The increasing frequency of compressor mechanical issues and questions arising regarding required capacity and efficiency provided the basis of this CIP. An engineer was contracted in 2018 to provide an evaluation based on compressor unit current conditions and operating parameters, air system controls, capacity needs, load duty cycles, and energy consumption analyses. The intent of the evaluation was to consider the most technically and economically sound options that take into consideration all of the existing sub-systems. This CIP budget is based on the evaluation of replacement compressor alternatives that were provided as part of the preliminary engineering evaluation.

Discussion of operating cost impact:

New and appropriately sized air compressors will reduce annual operating costs and reduce staff and/or contractor costs that would otherwise be associated with maintenance activities.

DEPARTMENT COST SUMMARY						
DEPARTMENT PHASE	2019	2020	2021	2022	2023	Total
Wastewater Equipment	100,000	-	-	-	-	\$ 100,000
Engineering	30,000	-	-	-	-	\$ 30,000
Total - Wastewater Capital Projects	\$ 130,000	\$ -	\$ -	\$ -	\$ -	\$ 130,000

COST ANALYSIS						
Estimated Cash Flows						
Components	2019	2020	2021	2022	2023	Total
Planning	30,000	-	-	-	-	\$ 30,000
Land Acquisition	-	-	-	-	-	-
Construction	100,000	-	-	-	-	\$ 100,000
Other	-	-	-	-	-	-
Total	\$ 130,000	\$ -	\$ -	\$ -	\$ -	\$ 130,000
Operating Cost Impact	-	-	-	-	-	-

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: Lift Station Improvements

PROJECT DESCRIPTION

Justification:

Lift stations convey sewage to interceptor sewers for gravity flow to the Wastewater Treatment Plant . Failure of lift stations pose the immediate risk of sanitary sewer back-ups into residential basements, businesses, and industries served in these areas. The 14 lift stations currently serving customers within the City of Appleton are a critical component of the sewerage system, and it is vital that their operational integrity be maintained at all times to prevent sanitary sewer overflows.

A 2018 CIP project at the Midway Road lift station advanced an alternative that provided unimpeded vehicular entry to lift station equipment during emergency situations as well as periodic maintenance events. This prioritized improvement focused on improving safety for maintenance staff and those driving along Midway Road while simultaneously facilitating the deployment of a portable emergency generator when or as required. The 2019 CIP phase will install new pumps with improved impellor section design to reduce the frequency of clogging. The existing electrical system will be updated to restore station reliability and compliance with current electrical codes. This project will require professional engineering services to prepare bidding documents. The project also requires Wisconsin Department of Natural Resources authorization.

The Summer Street lift station is a below grade "can" system that is intended to be rehabilitated or replaced with a submersible pump station similar to other recent lift station improvement projects (e.g. 2016 Scarlet Oak Improvements Project). The need for rehabilitation or wholesale upgrades will further be assessed in 2018 to appropriately determine future project scope and costs. In either scenario the existing 1960s vintage wetwell will be improved to address confined space. These projects will require professional engineering services to prepare bidding documents. The project also requires Wisconsin Department of Natural Resources authorization.

Discussion of operating cost impact:

Installing new pumps with updated electrical system will restore proper function to the station and reduce personnel service time and emergency calls.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE		2019	2020	2021	2022	2023	Total
Wastewater	Midway Road	200,000	-	-	-	-	\$ 200,000
	Summer St	-	-	-	-	400,000	\$ 400,000
Total - Wastewater Utility Capital Projects		\$ 200,000	\$ -	\$ -	\$ -	\$ 400,000	\$ 600,000

COST ANALYSIS

Components	Estimated Cash Flows						Total
	2019	2020	2021	2022	2023		
Planning	25,000	-	-	-	40,000		\$ 65,000
Land Acquisition	-	-	-	-	-		\$ -
Construction	175,000	-	-	-	360,000		\$ 535,000
Other	-	-	-	-	-		\$ -
Total	\$ 200,000	\$ -	\$ -	\$ -	\$ 400,000		\$ 600,000
Operating Cost Impact	-	-	-	-	-		\$ -

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: Piping Projects - Blended Sludge, Waste Gas, and Filtrate Piping

PROJECT DESCRIPTION

Justification:

The Appleton Wastewater Treatment Plant (AWWTP) experiences scale accumulation in the dewatering belt filter presses (BFP) and filtrate lines. The mineralogical scale otherwise known as "struvite" is composed of magnesium ammonium phosphate which are components abundant in wastewater. Struvite is a problem in wastewater treatment plants, particularly after anaerobic digesters when conditions are created that readily allow for the release of high amounts of ammonium and phosphate. The resultant scale forms on BFP lines and belts, drain pans, pumps, and will eventually close off system pipes. This project allows for piping systems to be accessed and repiped in order to mitigate struvite accumulation. Having access will allow for the use of 10,000 PSI high pressure blasting equipment. The high pressure blasting removes excessive struvite buildup which would otherwise constrict BFP filtrate flow conveyed to biological treatment. The piping improvements will make struvite removal activities more efficient, reduce costs, and be less disruptive to treatment and operations.

The waste gas piping and equipment has been in service since 1992. As a result of service life, some components are at the end of their useful life. This project will complete a conditions assessment of waste gas system piping and equipment. The staff will use the final report to contract for equipment repairs or replacements.

The raw sludge blend tank has also been in service (nearly continuously) since 1992. The system relies on a counter current heat exchanger to warm incoming waste for primary digestion. The pumps and heat exchanger have become worn to the point that replacement is necessary. This project will produce necessary repairs and will replace the pumps and heat exchanger process.

Discussion of operating cost impact:

As these projects are replacements for existing equipment, there is no anticipated operating cost impact.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE		2019	2020	2021	2022	2023	Total
Wastewater	Engineering	90,000	-	-	-	-	\$ 90,000
	Construction	1,051,000	-	-	-	-	\$ 1,051,000
Total - Wastewater Capital Projects Fund		\$ 1,141,000	\$ -	\$ -	\$ -	\$ -	\$ 1,141,000

COST ANALYSIS

Components	Estimated Cash Flows					Total
	2019	2020	2021	2022	2023	
Planning	90,000	-	-	-	-	\$ 90,000
Land Acquisition	-	-	-	-	-	\$ -
Construction	1,051,000	-	-	-	-	\$ 1,051,000
Other	-	-	-	-	-	\$ -
Total	\$ 1,141,000	\$ -	\$ -	\$ -	\$ -	\$ 1,141,000
Operating Cost Impact	-	-	-	-	-	\$ -

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: RAS Pump Replacements

PROJECT DESCRIPTION

Justification:

The Return Activated Sludge (RAS) pumps are an integral component of the Second Stage Activated Sludge system. The function of the pumps is to return the settled microorganisms from the final clarification tanks back to the inlet of the aeration tanks. This serves to allow the microbiological population to contact the incoming waste stream and under aerobic conditions, reduce the dissolved and colloidal material to a manageable biological floc which can be settled out in the final clarification tanks. It is also in this biological treatment stage that excess nutrients are removed from the waste stream.

Originally installed as part of the 1994 upgrade, the existing pumps, motors and controls have reached the end of their useful life. The pumps have had various mechanical parts (e.g. seals and bearings) including impellers replaced over the years. In June 2018 one of the pumps was removed for repair and it was discovered upon inspection that the internal pump housing, stuffing box, and shaft were deteriorated or excessively worn. A partial pump rebuild was performed in order to return the pump to service until a more thorough conditions assessment was conducted. The cost of a total rebuild is approximately 75% that of a new pump (partial rebuild is 36%). The electronic speed control (ESC) boards have reached a point of obsolescence and replacements are becoming more difficult and expensive to procure. Replacing the existing Eddie-current drives with variable frequency drives (VFD's) would mitigate the need for ESC replacement parts while gaining operational efficiency. Unlike a constant speed motor, VFDs generate higher supply side power factors at all loads which can result in reduced utility rates. They are more efficient at reduced speeds, in particular when under 80% of the design pump speed which is the range the RAS pumps typically operate. Lastly, VFD technology provides system control logic, fault protection and diagnostics which is not currently available with the existing equipment.

Replacing all twelve of the existing RAS pumps, motors and drive installations in the same year will provide economy of scale for bidding purposes while facilitating systematic equipment change out without disruption to treatment operations.

Discussion of operating cost impact:

The replacement of the existing RAS pump motors and VFD's will decrease electrical consumption while improving design rated pump capacities.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE		2019	2020	2021	2022	2023	Total
Wastewater	Engineering	50,000	-	-	-	-	\$ 50,000
	Contractor Fees	510,000	-	-	-	-	\$ 510,000
Total - DNR Replacement Fund		<u>\$ 560,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 560,000</u>

COST ANALYSIS

Estimated Cash Flows

Components	2019	2020	2021	2022	2023	Total
Planning	50,000	-	-	-	-	\$ 50,000
Land Acquisition	-	-	-	-	-	\$ -
Construction	510,000	-	-	-	-	\$ 510,000
Other	-	-	-	-	-	\$ -
Total	\$ 560,000	\$ -	\$ -	\$ -	\$ -	\$ 560,000
Operating Cost Impact	-	-	-	-	-	-

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: Receiving Station Improvements

PROJECT DESCRIPTION

Justification:

The AWWTP began accepting hauled wastes from out of the Appleton sewer service area in 1999. The program intent is to use available treatment capacity to offset community treatment expenses with the acceptance of wastes. The current four year average annual revenue generated from this program exceeds \$1.85 million. Since January 1, 2012 authorized haulers are billed by the Utilities based on a tier rate system determined by each waste's strength and volumes discharged. Wastes were formerly charged a flat rate based on volume only. The tier rate structure is designed to more effectively cover the costs of treatment, overhead, repair, and future improvements.

Authorized haulers deliver waste to the AWWTP receiving station via tanker truck, then discharge to one of two locations depending upon the waste characteristics or strength. Wastes defined as "low strength" are discharged to the treatment headworks. Wastes characterized as "high strength" are required to discharge to receiving station tanks located inside of L-Building. Wastes from the receiving station tanks are fed directly to the anaerobic digesters where they are more cost effectively treated and provide the opportunity for methane gas production and utilization. Nearly all are high strength wastes from food based industries located outside the Appleton sewer service area.

The current receiving station program is limited in waste storage capacity, surveillance, sampling, and provides few options to fully optimize digester gas production from various waste substrates through equilization. An engineering study performed in early 2012 developed a preliminary plan that addressed deficiencies and designed a station upgrade that would re-purpose an abandoned 185,000 gallon tank to increase capacity. Upgrading the facility will allow for extended hours of operation and the ability to increase revenues through tipping fees and enhanced biogas utilization. As AWWTP proves out gas utilization, there will be a desire to increase biogas generation to reduce energy expenditures in addition to increasing associated revenues from tipping fees.

Discussion of operating cost impact:

Project will increase capacity and revenues through tipping fees and expanded biogas utilization.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE		2019	2020	2021	2022	2023	Total
Wastewater	Engineering	-	-	-	200,000	-	\$ 200,000
	Construction	-	-	-	-	2,000,000	\$ 2,000,000
Total - Wastewater Capital Projects		\$ -	\$ -	\$ -	\$ 200,000	\$ 2,000,000	\$ 2,200,000

COST ANALYSIS

Estimated Cash Flows

Components	2019	2020	2021	2022	2023	Total
Planning	-	-	-	200,000	-	\$ 200,000
Land Acquisition	-	-	-	-	-	\$ -
Construction	-	-	-	-	2,000,000	\$ 2,000,000
Other	-	-	-	-	-	\$ -
Total	\$ -	\$ -	\$ -	\$ 200,000	\$ 2,000,000	\$ 2,200,000
Operating Cost Impact	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

CITY OF APPLETON 2019 BUDGET CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

IDENTIFICATION

Project Title: Appleton Memorial Park - Renovations

PROJECT DESCRIPTION

Justification:

The last master plan for Appleton Memorial Park was developed in 2015. Significant changes have been made to the park since the last master planning efforts were completed. Changes include two stormwater ponds, naturalization of the stormwater channel through the park, construction of the Miracle League Field, new restroom facility to service the west end of the ball diamond complex, and additional playground equipment near the Miracle League Field. Another major change in the park was the termination of the agreement between the City of Appleton and the Gardens of the Fox Cities. With the termination of this agreement, the 35 acres on the west end of the park, the Scheig Center and surrounding gardens became the sole responsibility of the Parks, Recreation and Facilities Management Department.

The 2015 master plan included the following recommendations:

- 2021 - Design for Phase 1 - Parking lot, pavilion, park amenities, and Scheig connection.
 - 2022 - Construction for Phase 1 - Parking lot, pavilion, park amenities, and Scheig connection.
 - 2022 - Design for Phase 2 and 3 - Parking lot on Northland Avenue and trail system throughout the park.
 - 2023 - Construction of Phase 2 - Parking lot and a section of the trail system.
- Please also refer to the Appleton Memorial Park/Athletic Fields CIP request for recommendations to the ball diamond facilities and amenities.

Discussion of operating cost impact:

Any impacts to the operating costs of the park will be addressed when the specific projects identified in the master plan are included in the Department's 5-Year Capital Improvement Program.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE	2019	2020	2021	2022	2023	Total
PRFMD Design	-	-	125,000	40,000	-	\$ 165,000
Phase 1	-	-	-	1,100,000	-	\$ 1,100,000
Phase 2	-	-	-	-	350,000	\$ 350,000
Total - Facilities Capital Projects Fund	\$ -	\$ -	\$ 125,000	\$ 1,140,000	\$ 350,000	\$ 1,615,000

COST ANALYSIS

Components	Estimated Cash Flows					
	2019	2020	2021	2022	2023	Total
Planning	-	-	125,000	40,000	15,000	\$ 180,000
Land Acquisition	-	-	-	-	-	\$ -
Construction	-	-	-	1,100,000	335,000	\$ 1,435,000
Other	-	-	-	-	-	\$ -
Total	\$ -	\$ -	\$ 125,000	\$ 1,140,000	\$ 350,000	\$ 1,615,000
Operating Cost Impact	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -