

COUNCIL ACTION FORM

SUBJECT: WATER RATE ADJUSTMENT FOR FY 2019/20

BACKGROUND:

Each year as a part of the annual budget process, staff updates a spreadsheet model for the Water and Sewer Funds that reflects current and projected operating and capital expenses for the utilities over the next ten years, and the resulting annual ending fund balance in each of the funds. This model is used to establish a long-range pattern of rate increases that will fully finance these self-funded enterprise utilities, including a 25% operating reserve.

During the development of the FY 19/20 budget, staff determined that a seven percent (7%) increase to water rates would be needed, effective July 1, 2019. While the need for an increase was shared with Council during the budget presentations, no formal action has yet been taken to adjust the rates. **Attached to this Council Action Form is a draft ordinance that will increase the water rates by 7%, effective for all bills mailed on or after July 1, 2019. No sewer rate increase is proposed for the coming fiscal year.**

The slides attached to this Council Action Form provide a summary of the fund balance analysis in a format that is very similar to what has been used in prior years.

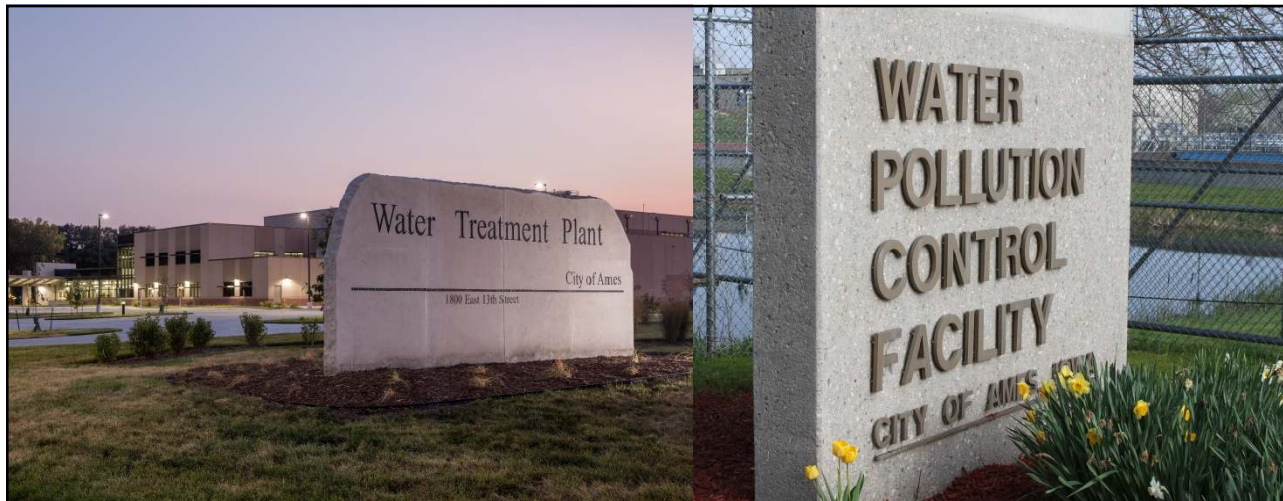
ALTERNATIVES:

1. Approve on first reading an ordinance that adjusts water rates by seven percent (7%), effective for bills mailed on or after July 1, 2019.
2. Direct staff to make modifications to the rate ordinance.
3. Do not take any action to adjust water rates, and give staff direction on expenditure reductions in order to maintain a positive Water Fund balance.

MANAGER'S RECOMMENDED ACTION:

The proposed rate increase is necessary to fund the on-going operations and maintenance budget plus the anticipated capital improvements projects.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby approving on first reading an ordinance that adjusts water rates by seven percent (7%) effective for bills mailed on or after July 1, 2019.



FY 2019-2020 Water & Sewer Rates

March 5, 2019

Entry signage at the Ames Water Treatment Plant and Ames Water Pollution Control Facility



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Outline

- National & State-Wide Trends in Rates
- Projected Need for Revenue Increase
- Translating Revenue Needs to Rates
- Customer Perspective
- Council Direction



Water meters lined up on a test bench

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National & State-Wide Trends

Visitors at the inaugural open house tours of the new Ames Water Plant

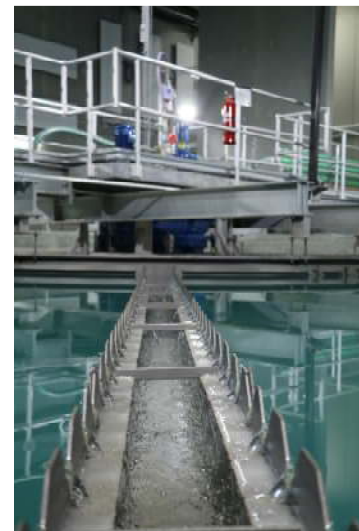


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National and State Trends

Data sources include:

- **2017 Cost of Clean Water Index**
National Association of Clean Water Agencies
- **2016 Water and Wastewater Rate Survey**
American Water Works Association
- **2018 Iowa Water and Wastewater Rate Survey**
City of Ames Water and Pollution Control



*Solids Contact Unit in service
Ames Water Plant*

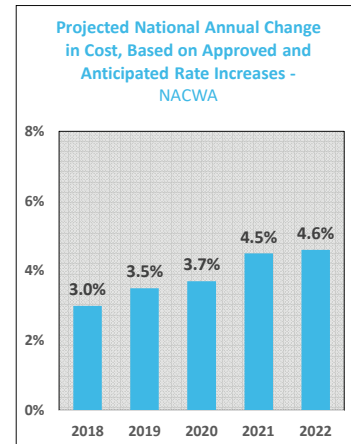
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National Trends

2017 Cost of Clean Water Index, NACWA

- Average annual wastewater bill has doubled in the past 14 years
- Wastewater utilities expect charges to increase from 3.0% to 4.6% per year for the next 5 years
- Nationally, the average increase in 2016 was 1.7x the rate of inflation

(16th consecutive year that sewer rates nationally have outpaced inflation)



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National Trends

2016 Water & Wastewater Rate Survey, American Water Works Association

- 88% of Drinking Water Utilities have increased rates in the past two years
- 85% of Wastewater Utilities have increased rates in the past two years.
- Lowest costs for both water and sewer were in the Midwest



Water main break repair in Ames
Circa 1953

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National Trends

2012 to 2016

Average Annual Increase in Water Rates: 5.9%

Average Annual Increase in Sewer Rates: 4.4%

Average Annual Increase in CPI: 1.1%

Source: 2016 Water and Wastewater Rate Survey, AWWA/Raftelis Financial Consultants



Cogeneration switchgear
Ames Water Pollution Control Facility

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Recent Rate Adjustments in Ames

	Water	Sewer
FY 15/16	4%	5%
FY 16/17	--	--
FY 17/18	--	--
FY 18/19	3.5%	3%
Net Annual Average	1.9%	2.0%



pH meter and buffers
Ames Water Plant

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Ames Trends vs. National Trends

Water

National Average Annual Increase:	5.9%
Ames Average Annual Increase:	1.9%

Sewer

National Average Annual Increase:	4.4%
Ames Average Annual Increase:	2.0%
Average Annual Increase in CPI:	1.13%

National and CPI Data: 2012 – 2016
Ames Data: 2014 – 2018



Smart Water Conservation Promotion
Water & Pollution Control Dept.

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Ames Trends vs. Iowa Trends

Water

Iowa Average Annual Increase:	5.9%
Ames Average Annual Increase:	1.9%

Sewer

Iowa Average Annual Increase:	5.1%
Ames Average Annual Increase:	2.0 %
Average Annual Increase in CPI:	2.0%

Iowa, Ames, and CPI Data: 2014 – 2018

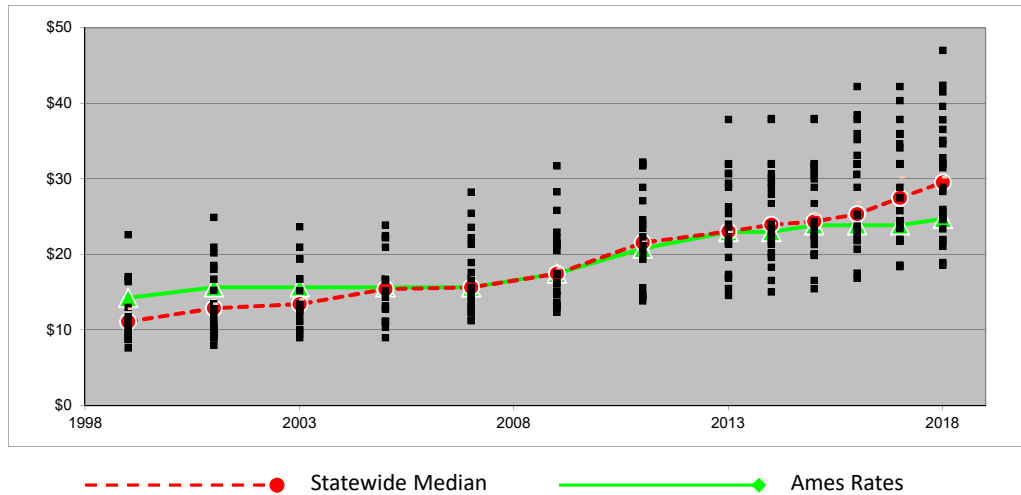


1 million gallon elevated tank
Mortensen Road and County Line Road

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Iowa Trends in Water Rates

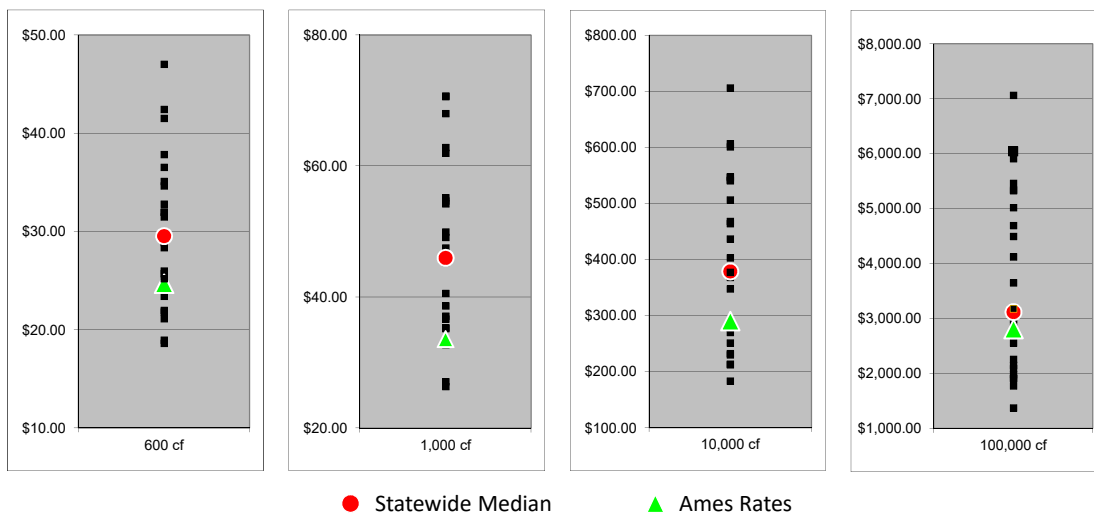
1999-2018, Cities with population >10,000 with lime softening, 600 cf per month



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Comparing Across Demand Thresholds

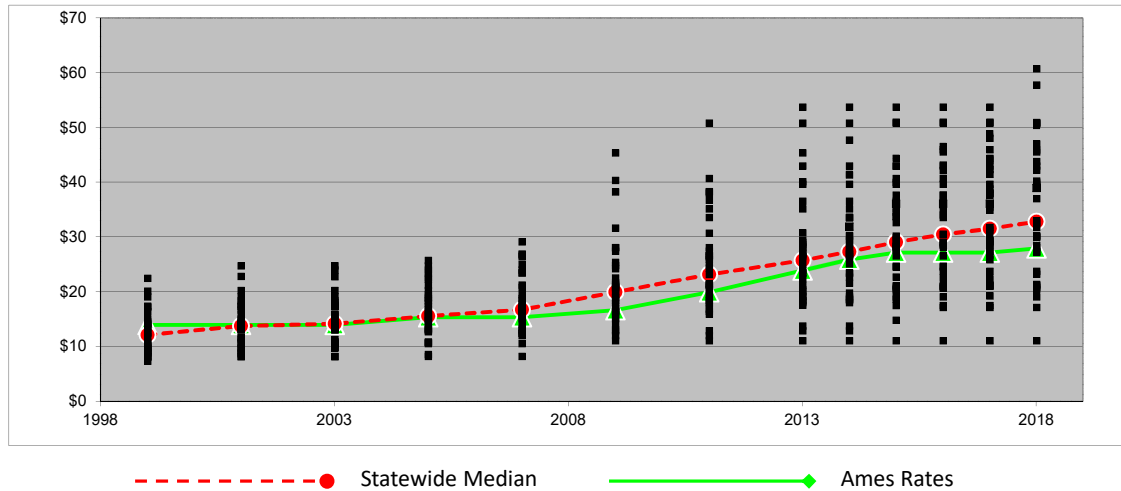
Cities with population >10,000 with lime softening, 2018



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Iowa Trends in Sewer Rates

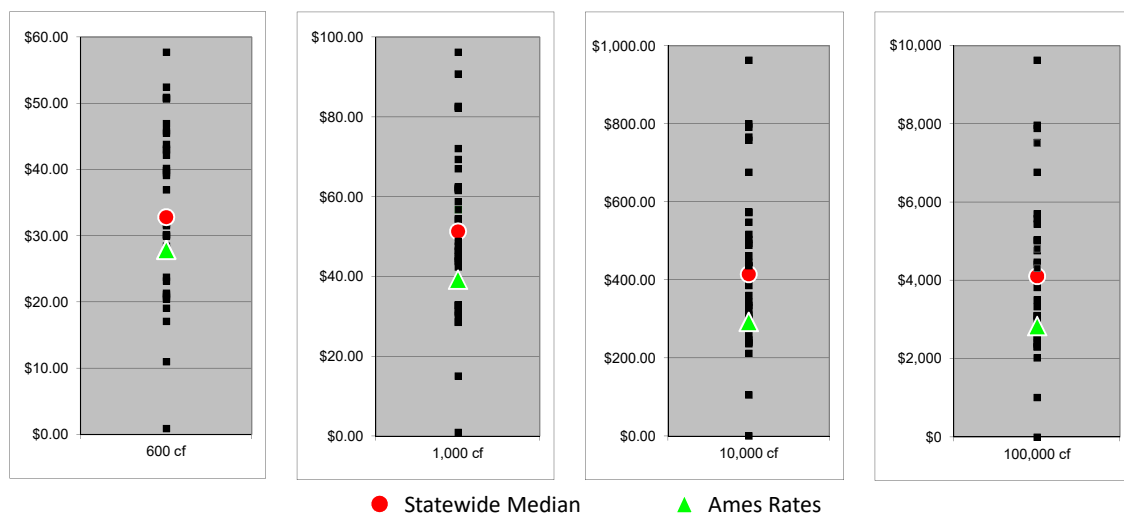
1999-2018, Cities with population >10,000, 600 cf per month



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Comparing Across Demand Thresholds

Cities with population >10,000, 2018



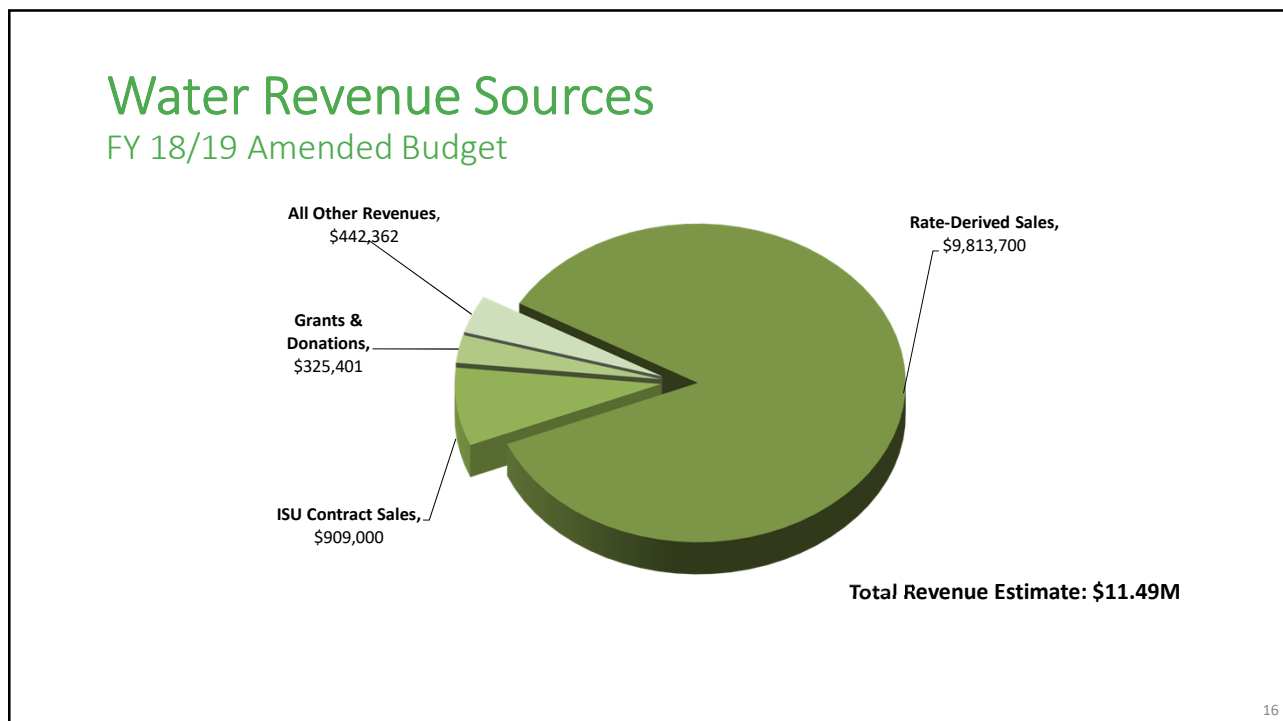
14



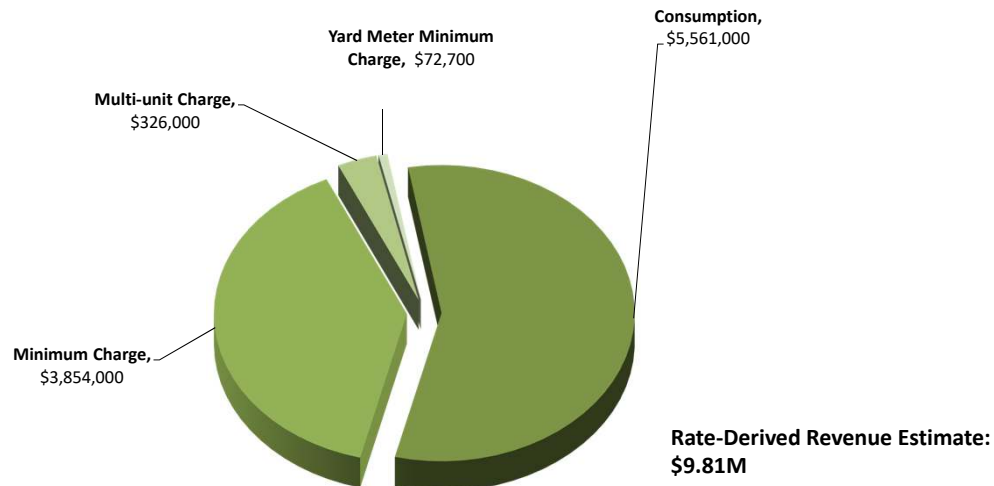
Revenue Need and Rate Adjustments in Ames

*Best Tasting Water in Iowa
2017 & 2018*

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Water Rate-Derived Revenue



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Current Water Rates

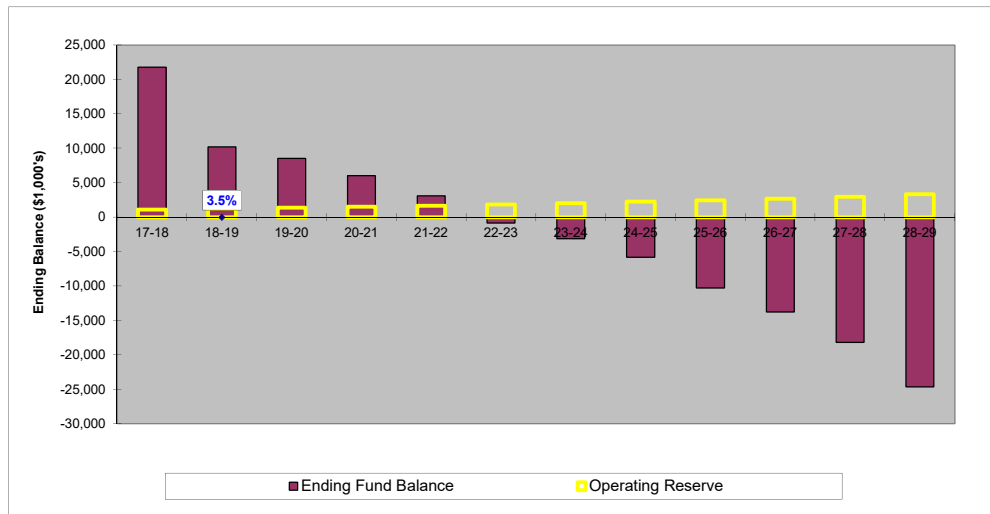
Winter	\$0.0222
All customers; all consumption	
Summer	
Residential	
Block 1 (First 1,000 cf)	\$0.0222
Block 2 (Next 1,500 cf)	\$0.0392
Block 3 (Over 2,500 cf)	\$0.0590
Irrigation & Yard Water	
Block 1 (First 2,000 cf)	\$0.0321
Block 2 (Next 3,000 cf)	\$0.0590
Block 3 (Over 5,000 cf)	\$0.0982
Non-Residential	\$0.0291
All consumption	
Non-Peaking Industrial	\$0.0222
All consumption	



Piping in High Service Pump Room
Ames Water Plant

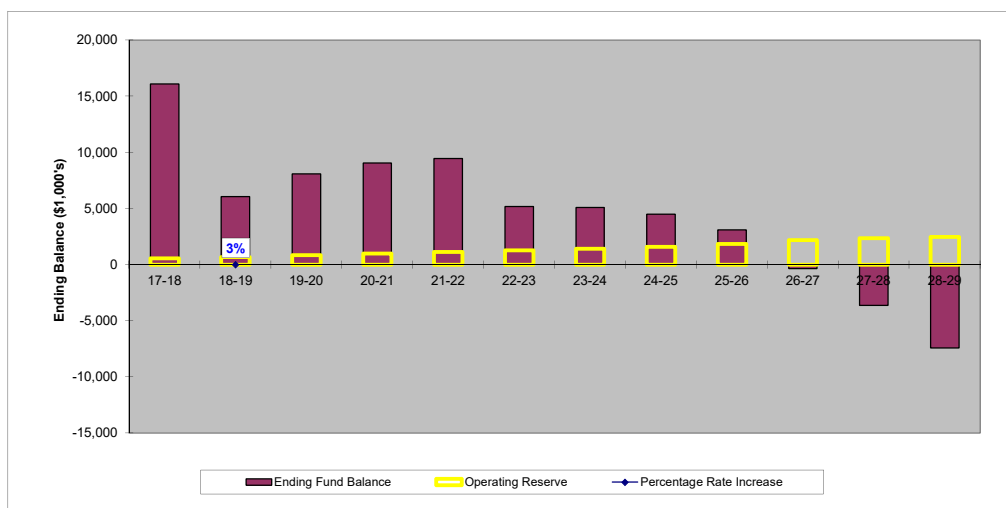
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Water Fund Rate Model – No Adjustments



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Sewer Fund Rate Model – No Adjustments



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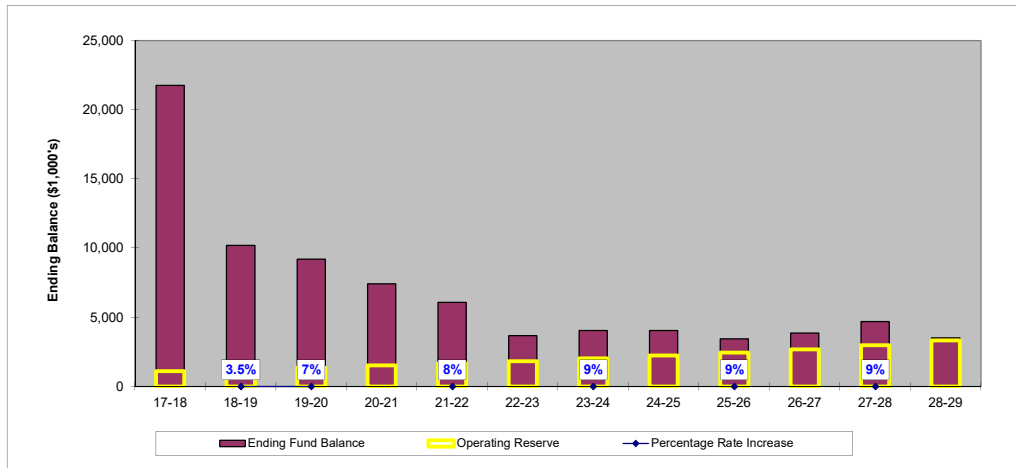
Guiding Philosophy on Rates

- Rate increases should be done with smaller percentage increases on a more frequent basis, as opposed to larger increases on a less frequent basis.
- Slowly grow the operating reserve in each Fund over time until it reaches 25% of the Fund's annual operating expenses



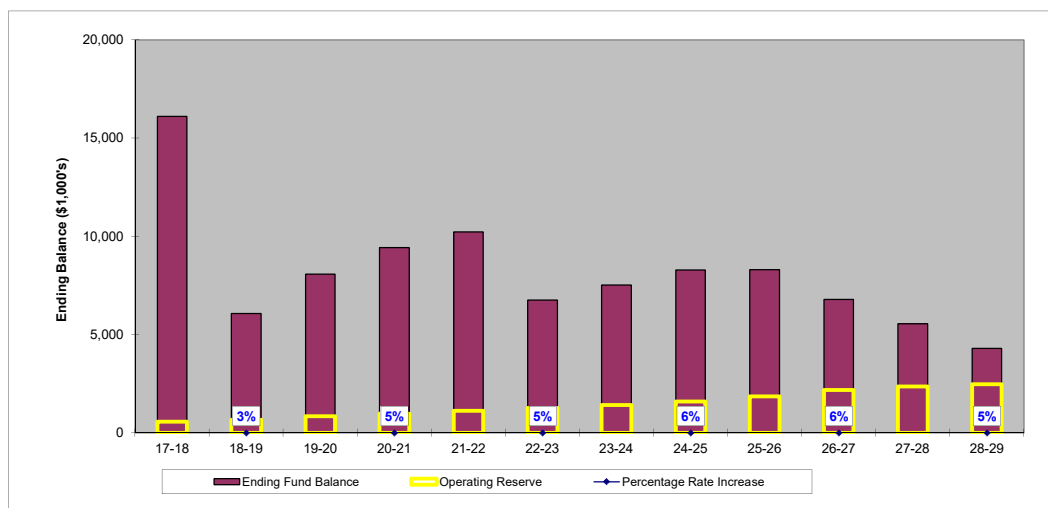
Limestone sign salvaged from the 1924 water plant, relocated to the new facility

Water Fund Rate Model



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Sewer Fund Rate Model



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Water and Sewer Rate Projections

	Last Year	Current Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29
Water Fund		3.5%	7%		9%		9%		9%		9%	
Sewer Fund		3%		5%		5%		6%		6%		5%



Revised Water Rates

	<u>Existing</u>	<u>7% Increase</u>	<u>Proposed</u>
Winter			
All customers; all consumption	\$0.0222	\$0.0016	\$0.0238
Summer			
Residential			
Block 1 (First 1,000 cf)	\$0.0222	\$0.0016	\$0.0238
Block 2 (Next 1,500 cf)	\$0.0392	\$0.0027	\$0.0420
Block 3 (Over 2,500 cf)	\$0.0590	\$0.0041	\$0.0631
Irrigation & Yard Water			
Block 1 (First 2,000 cf)	\$0.0321	\$0.0022	\$0.0343
Block 2 (Next 3,000 cf)	\$0.0590	\$0.0041	\$0.0631
Block 3 (Over 5,000 cf)	\$0.0982	\$0.0069	\$0.1051
Non-Residential			
All consumption	\$0.0291	\$0.0020	\$0.0311
Non-Peaking Industrial			
All consumption	\$0.0222	\$0.0016	\$0.0238



Bloomington Road Elevated Tank (BRET)
as seen from above

Associated Rates and Fees

- Water Minimum bills, multiple dwelling unit fees would also adjust by 7%
- Meter setting fees would be adjusted based on actual cost recovery
- Adding standard fees for wastewater sampling



Sample Customer Bill – Median Residential

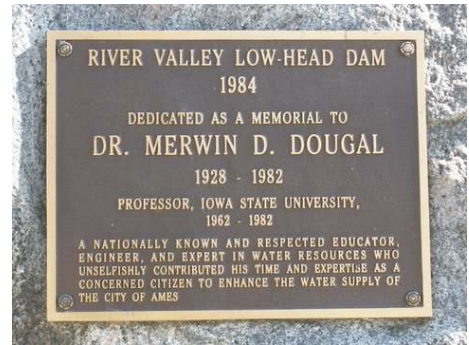
Electric / Water Use	Electric Summer	Storm Water	Water Summer	Sewer	Total
600 kWh and 600 cf	\$81.10	\$4.95	\$24.69	\$27.95	\$138.69
Electric ECA	-\$3.66				-\$3.66
Totals	\$77.44	\$4.95	\$24.69	\$27.95	\$135.03
Increase Due to Rate Change	\$0.00	\$0.00	\$1.73	\$0.00	\$1.73
Totals	\$77.44	\$4.95	\$26.42	\$27.95	\$136.76
% Impact on Total Bill					1.28%

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Recommended Direction & Timeline

- Adopt on first reading an ordinance to
 - Adjust **Water Rates by 7%**
 - New rates **effective July 1, 2019**
- Timeline
 - First reading on March 5
 - Second reading on March 26
 - Third reading and adoption on April 9



*Memorial plaque at the Low head Dam
Located in North River Valley Park*

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Additional Rate Samples

Ames Water Pollution Control Facility



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Sample Customer Bill – Minimal Use Residential

Electric / Water Use	Electric Summer	Storm Water	Water Summer	Sewer	Total
100 kWh and 100 cf	\$20.45	\$4.95	\$13.59	\$13.85	\$52.84
Electric ECA	-\$0.61				-\$0.61
Totals	\$19.84	\$4.95	\$13.59	\$13.85	\$52.23
Increase Due to Rate Change	\$0.00	\$0.00	\$0.95	\$0.00	\$0.95
Totals	\$19.84	\$4.95	\$14.54	\$13.85	\$53.18
% Impact on Total Bill					1.82%

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Sample Customer Bill – Median Residential

Electric / Water Use	Electric Summer	Storm Water	Water Summer	Sewer	Total
600 kWh and 600 cf	\$81.10	\$4.95	\$24.69	\$27.95	\$138.69
Electric ECA	-\$3.66				-\$3.66
Totals	\$77.44	\$4.95	\$24.69	\$27.95	\$135.03
Increase Due to Rate Change	\$0.00	\$0.00	\$1.73	\$0.00	\$1.73
Totals	\$77.44	\$4.95	\$26.42	\$27.95	\$136.76
% Impact on Total Bill					1.28%

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Sample Customer Bill – Large Residential

Electric / Water Use	Electric Summer	Storm Water	Water Summer	Sewer	Total
1,000 kWh and 1,000 cf	\$129.62	\$4.95	\$33.57	\$39.23	\$207.37
Electric ECA	-\$6.10				-\$6.10
Totals	\$123.52	\$4.95	\$33.57	\$39.23	\$201.27
Increase Due to Rate Change	\$0.00	\$0.00	\$2.35	\$0.00	\$2.35
Totals	\$123.52	\$4.95	\$35.92	\$39.23	\$203.62
% Impact on Total Bill					1.17%

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Sample Customer Bill – Small Commercial (GP)

Electric / Water Use	Electric Summer	Storm Water	Water Summer	Sewer	Total
2,000 kWh and 600 cf	\$254.40	\$4.95	\$28.83	\$27.95	\$316.13
Electric ECA	-\$12.20				-\$12.20
Totals	\$242.20	\$4.95	\$28.83	\$27.95	\$303.93
Increase Due to Rate Change	\$0.00	\$0.00	\$2.02	\$0.00	\$2.02
Totals	\$242.20	\$4.95	\$30.85	\$27.95	\$305.95
% Impact on Total Bill					0.66%

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Sample Customer Bill – Small Commercial (GP)

Electric / Water Use	Electric Summer	Storm Water	Water Summer	Sewer	Total
5,000 kWh and 1,000 cf	\$612.60	\$4.95	\$40.47	\$39.23	\$697.25
Electric ECA	-\$30.50				-\$30.50
Totals	\$582.10	\$4.95	\$40.47	\$39.23	\$666.75
Increase Due to Rate Change	\$0.00	\$0.00	\$2.83	\$0.00	\$2.83
Totals	\$582.10	\$4.95	\$43.30	\$39.23	\$669.58
% Impact on Total Bill					0.42%

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Sample Customer Bill – Small Commercial (GP)

Electric / Water Use	Electric Summer	Storm Water	Water Summer	Sewer	Total
10,000 kWh and 3,000 cf	\$1,209.60	\$9.90	\$110.03	\$95.63	\$1,425.16
Electric ECA	-\$61.00				-\$61.00
Totals	\$1,148.60	\$9.90	\$110.03	\$95.63	\$1,364.16
Increase Due to Rate Change	\$0.00	\$0.00	\$7.70	\$0.00	\$7.70
Totals	\$1,148.60	\$9.90	\$117.73	\$95.63	\$1,371.86
% Impact on Total Bill					0.56%

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Sample Customer Bill –Commercial (LP)

Electric / Water Use	Electric Summer	Storm Water	Water Summer	Sewer	Total
20,000 kWh and 5,000 cf	\$2,181.81	\$9.90	\$168.23	\$152.03	\$2,511.97
Electric ECA	-\$122.00				-\$122.00
Totals	\$2,059.81	\$9.90	\$168.23	\$152.03	\$2,389.97
Increase Due to Rate Change	\$0.00	\$0.00	\$11.78	\$0.00	\$11.78
Totals	\$2,059.81	\$9.90	\$180.01	\$152.03	\$2,401.75
% Impact on Total Bill					0.49%

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Sample Customer Bill –Commercial (LP)

Electric / Water Use	Electric Summer	Storm Water	Water Summer	Sewer	Total
60,000 kWh and 15,000 cf	\$6,221.55	\$14.85	\$481.97	\$434.03	\$7,152.40
Electric ECA	-\$366.00				-\$366.00
Totals	\$5,855.55	\$14.85	\$481.97	\$434.03	\$6,786.40
Increase Due to Rate Change	\$0.00	\$0.00	\$33.74	\$0.00	\$33.74
Totals	\$5,855.55	\$14.85	\$515.71	\$434.03	\$6,820.14
% Impact on Total Bill					0.50%

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Sample Customer Bill –Commercial (LP)

Electric / Water Use	Electric Summer	Storm Water	Water Summer	Sewer	Total
100,000 kWh and 20,000 cf	\$10,284.95	\$44.55	\$672.93	\$575.03	\$11,577.46
Electric ECA	-\$610.00				-\$610.00
Totals	\$9,674.95	\$44.55	\$672.93	\$575.03	\$10,967.46
Increase Due to Rate Change	\$0.00	\$0.00	\$47.11	\$0.00	\$47.11
Totals	\$9,674.95	\$44.55	\$720.04	\$575.03	\$11,014.57
% Impact on Total Bill					0.43%

ORDINANCE NO.

AN ORDINANCE TO AMEND THE MUNICIPAL CODE OF THE CITY OF AMES, IOWA, BY REPEALING CHAPTER 28, SECTION 201(1)(b)(ii)(a)(b), 2(b)(ii)(a)(b), 3(b)(ii)(a)(b), 4(b)(ii)(a)(b), 5(b)(ii)(a)(b), 7, 8 AND ENACTING A NEW CHAPTER 28, SECTION 201(1)(b)(ii)(a)(b), 2(b)(ii)(a)(b), 3(b)(ii)(a)(b), 4(b)(ii)(a)(b), 5(b)(ii)(a)(b), 7, 8. THEREOF, FOR THE PURPOSE OF INCREASE OF WATER RATES AND CHARGES; REPEALING ANY AND ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT TO THE EXTENT OF SUCH CONFLICT; AND ESTABLISHING AN EFFECTIVE DATE.

BE IT ENACTED, by the City Council for the City of Ames, Iowa, that:

Section One. The Municipal Code of the City of Ames, Iowa shall be and the same is hereby amended by repealing Chapter 28, Section 201(1)(b)(ii)(a)(b), 2(b)(ii)(a)(b), 3(b)(ii)(a)(b), 4(b)(ii)(a)(b), 5(b)(ii)(a)(b), 7, 8 and enacting a new Chapter 28, Section 201(1)(b)(ii)(a)(b), 2(b)(ii)(a)(b), 3(b)(ii)(a)(b), 4(b)(ii)(a)(b), 5(b)(ii)(a)(b), 7, 8 as follows:

Sec. 28.201. WATER RATES AND CHARGES

The rates and charges for water supplied to consumers by the water utility of the city, to be billed on or after July 1, 2019 are as follows:

(1) Residential Rates.

(a) **Availability.** The residential rate shall apply to all customer accounts within the Ames corporate limits serving properties that are intended for occupancy by a single family as defined by the Ames Zoning Ordinance, provided that such accounts consist of no more than two dwelling units served by a single water meter or to multiple unit residential structures (such as apartment buildings) where every dwelling unit is separately metered. The rate does not apply to domestic uses that consist of more than two dwelling units served by a single meter or to water accounts that provide service for common areas such as shared laundry facilities or for general property maintenance.

- (b) **Rate per billing period.** For each monthly billing period a residential rate customer:
- (i) shall be charged a minimum charge based on meter size, and in addition
 - (ii) shall be charged for water usage during the billing periods as follows:
 - (a) for bills mailed on or between July 1 and October 31 (summer period):
\$0.0238 per cubic foot for the first 1000 cubic feet of usage
\$0.0420 per cubic foot for the next 1500 cubic feet of usage
\$0.0631 per cubic foot for all usage over 2500 cubic feet
 - (b) for bills mailed on or between November 1 and June 30 (winter period):
\$0.0238 per cubic foot

(Ord. No. 4351, 5-8-18)

(2) Non-residential (Commercial) Rates

(a) **Availability.** The non-residential rate shall apply to all accounts that do not meet the criteria for residential, irrigation and yard water, rural water, or non-peaking industrial rates.

- (b) **Rate per billing period:** For each monthly billing period a non-residential customer:
- (i) shall be charged a minimum charge based on meter size, and in addition
 - (ii) shall be charged for water usage during the billing periods as follows:
 - (a) for bills mailed on or between July 1 and October 31 (summer period):
\$0.0311 per cubic foot
 - (b) for bills mailed on or between November 1 and June 30 (winter period):
\$0.0238 per cubic foot

(Ord. No. 4351, 5-8-18)

(3) **Non-Peaking Industrial Rate.**

(a) **Availability.** The non-peaking industrial rate shall be available to all non-residential rate customers who meet the following criteria:

(i) Average winter usage greater than 100,000 cubic feet per billing period. Average winter usage per billing period will be calculated by taking the sum of the usage during the most previous December, January, and February billing periods and dividing by three.

(ii) **A summer peaking factor equal to or less than 120%.** The summer peaking factor shall be computed by taking the largest consumption billed during the most recent summer billing periods (bills mailed July, August, September, and October) and dividing it by the average winter usage, with the result expressed as a percentage.

(b) **Rate per Billing Period.** For each monthly billing period a non-peaking industrial rate customer:

(i) shall be charged a minimum charge based on meter size, and in addition

(ii) shall be charged for water usage during the billing periods as follows:

(a) for bills mailed on or between July 1 and October 31 (summer period):

\$0.0238 per cubic foot

(b) for bills mailed on or between November 1 and June 30 (winter period):

\$0.0238 per cubic foot

(Ord. No. 4351, 5-8-18)

(4) **Irrigation and Yard Water Service Rate.**

(a) **Availability.** The irrigation and yard water rate shall apply to all separately metered water uses that meet one of the following criteria:

(i) Serves primarily outdoor water uses, such as irrigation systems and outside hose bibs.

(ii) Serves cooling towers, spray ponds, evaporative condensers, chillers, or such similar uses where water is used as a medium for cooling.

(iii) Serves as a temporary water service, whether for irrigation purposes or for other outdoor uses.

(b) **Rate per Billing Period.** For each monthly billing period an irrigation and yard water rate customer:

(i) shall be charged a minimum charge as described below, and in addition

(ii) shall be charged for water usage during billing periods as follows:

(a) for bills mailed on or between July 1 and October 31 (summer period):

\$0.0343 per cubic foot for the first 2000 cubic feet of usage

\$0.0631 per cubic foot for the next 3000 cubic feet of usage

\$0.1051 per cubic foot for all usage greater than 5000 cubic feet.

(b) for bills mailed on or between November 1 and June 30 (winter period):

\$0.0238 per cubic foot

(Ord. No. 4351, 5-8-18)

(5) **Rural Water Rate.**

(a) **Availability.** The rural water rate shall apply to all customer accounts outside the Ames corporate limits, except those covered by a separate wholesale contract or agreement for service.

(b) **Rate per billing period.** For each monthly billing period, a rural water rate customer:

(i) shall be charged a Rural water minimum charge based on meter size.

(ii) shall be charged for water usage during billing periods as follows:

(a) for bills mailed on or between July 1 and October 31 (summer period):

\$0.0395 per cubic foot for the first 2000 cubic feet of usage

\$0.0726 per cubic foot for the next 3000 cubic feet of usage

\$0.1209 per cubic foot for all usage greater than 5000 cubic feet.

(b) for bills mailed on or between November 1 and June 30 (winter period):

\$0.0274 per cubic foot for all consumption

(Ord. No. 4351, 5-8-18)

(6) **Water Rate and Charge Adjustments.** It shall be the duty of the director of water and pollution control to review and recommend to the city council revisions of the rates and charges established and set out in this division at intervals appropriate to provide for the funding needs of the utility.

(7) **Minimum charges.** For each monthly billing, each customer shall be charged a minimum monthly charge based on the size of the water meter (s) and/or irrigation meter (s) at each location. The minimum monthly charge may be prorated, based on a 30-day billing period, for the customer's initial and/or final bills, provided that in no case shall the minimum monthly charge be less than five dollars and eighty-four cents (\$5.84).

The minimum monthly charge for each water meter location shall be as follows:

Size of Meter	Residential, Non-residential, Non-peaking Industrial, and Irrigation Accounts	Yard Water Accounts	Rural Water Accounts
5/8" or 5/8"x3/4"	12.16	4.61	13.99
3/4 inch	24.32	7.15	27.97
1 inch	48.65	9.96	55.95
1-1/2 inch	97.30	13.74	111.90
2 inch	194.60	18.27	223.79
2 inch, battery of 2	376.92	--	433.46
2 inch, battery of 3	559.32	--	643.22
3 inch	389.11	23.76	447.48
4 inch	656.59	29.54	755.08
6 inch	1,094.31	35.38	1,258.46
8 inch	2,188.62	41.22	2,516.91
10 inch	3,282.93	46.62	3,775.37

(Ord. No. 4351, 5-8-18)

(8) **Multiple dwellings – Mobile home parks.** Multiple dwellings, including mobile home parks, may be serviced from a single water meter. However, there shall be a surcharge added to the water rates set forth above, to be calculated as follows:

For a 5/8 inch meter serving 2 or more dwelling units..... 3.50/month/unit
For a ¾ inch meter serving 4 or more dwelling units..... 3.50/month/unit
For a 1 inch meter serving 8 or more dwelling units..... 3.50/month/unit
For a 1-1/2 inch meter serving 16 or more dwelling units..... 3.50/month/unit
For a 2 inch meter serving 30 or more dwelling units..... 104.76/month
for the first 30 units plus \$5.44/month per unit
for each additional unit in excess of 30 units
For a 3 inch or larger meter serving any number of dwelling units 4.81/month/unit

...

Section Two. All ordinances, or parts of ordinances, in conflict herewith are hereby repealed to the extent of such conflict, if any.

Section Three. This ordinance shall be in full force and effect from and after its passage and publication as required by law.

Passed this _____ day of _____, _____.

Diane R. Voss, City Clerk

John A. Haila, Mayor