2019



ANNUAL REPORT





COUNCIL BLUFFS WATER WORKS

Safe Drinking Water Is Our Business

MISSION STATEMENT:
THE COUNCIL BLUFFS WATER WORKS IS COMMITTED TO PROVIDING THE BEST POSSIBLE SERVICE WHILE SUPPLYING ADEQUATE QUANTITIES OF HIGH QUALITY TAP WATER TO MEET ALL THE DOMESTIC, INDUSTRIAL AND FIRE PROTECTION NEEDS OF OUR CUSTOMERS AND OUR COMMUNITY.

Top: Narrows Water Purification Plant and Bottom: Council Point Water Purification Plant

Front Cover Photo:

CHAIRMAN'S REPORT

Again, in 2019, flooding along the Missouri River garnered most of the headlines. Widespread heavy late winter snows along with heavy rains that coincided with spring snowmelt caused tributaries to go out of their banks, raising the Missouri stage to near record levels, even rivaling the historic flood year of 2011. While fortunate that direct damage to our facilities was limited, additional costs for water treatment and various other high river operations did increase our operating expenses. On top of that our residential water sales were depressed due to the much higher than normal rainfall experienced throughout much of the year. Many of our projects were affected, including the West Broadway transmission main relocation that was delayed by the high groundwater table. Our well field expansion project was also delayed by the high river.

In 2019, nearly eighty percent or \$2,900,000 of our capital improvement dollars were directed towards water distribution system improvements, most of which was for water main replacement efforts. The Council Bluffs Water Works continues to coordinate with the IDOT for on-going Interstate improvements requiring relocations of water mains. We also continued our coordination of projects with the City including joint projects in the 1st Street Neighborhood area and East Manawa. The joint project formula has resulted in value added benefits for our customers and community. As previously mentioned, the relocation of the West Broadway transmission main to Avenue A became much more challenging due to the high-water table caused by the sustained high river. However, our staff worked closely with our engineer and contractor to find ways to move the project forward to the extent possible in order to accommodate the City's West Broadway reconstruction schedule.

Maintaining our facilities and equipment is the Board's foremost priority. In 2019, the Board approved additional expenditures for new equipment including a new backhoe loader so that our distribution staff and employees have the equipment necessary to make water main repairs as timely as possible in order to limit water service disruptions to our customers. A new lime slaker and potassium permanganate chemical feeders were purchased for proper chemical addition and treatment of water so that we can deliver safe, clean drinking water to our customers. We continue to upgrade our water meters with Automatic Meter Reading technology. These are examples of the continuous process of investment and reinvestment to ensure the reliability of our public water system.

Even with all the demands for resources required to maintain our water system the Board is committed to maintaining stable water rates. A well-maintained public water supply system is essential to a community's public health, public safety, economic development and quality of life. The Board of Water Works Trustees and employees will meet any challenge to fulfill its obligation and mission to our customers to provide a safe, dependable and an affordable supply of high-quality drinking water from the tap. Please read this report that details the accomplishments and challenges of the dedicated employees of the Council Bluffs Water Works.

Martin L. Brooks Chairperson

Trustees: Carl L. Heinrich Maureen R. Kruse Michael J. Wallner Caitlin A. Beresford

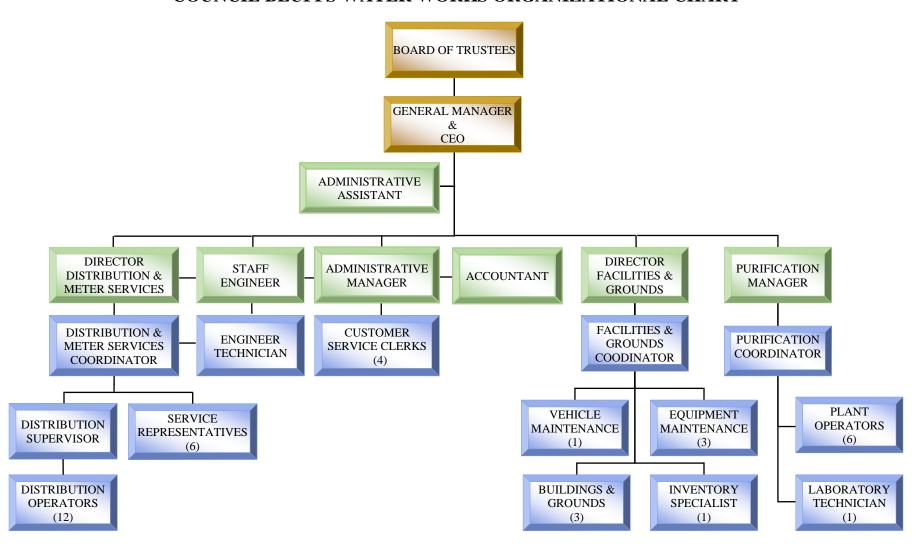
2019 RATE SCHEDULE

Monthly Retail Volume Charges			
	Monthly Billing		
	Inside City (\$/CCF)	Outside City (\$/CCF)	
First 1,500 Cubic Feet	\$3.70	\$5.55	
Next 28,500 Cubic Feet	\$2.69	\$4.04	
Over 30,000 Cubic Feet	\$1.70	\$2.55	

Bi-Monthly Retail Volume Charges			
	Bi-Monthly Billing		
	Inside City (\$/CCF)	Outside City (\$/CCF)	
First 3,000 Cubic Feet	\$3.70	\$5.55	
Next 57,000 Cubic Feet	\$2.69	\$4.04	
Over 60,000 Cubic Feet	\$1.70	\$2.55	

Cubic foot = 7.48 gallons 100 cubic feet (CCF) = 748 gallons

COUNCIL BLUFFS WATER WORKS ORGANIZATIONAL CHART



ORGANIZATION

AND

PERSONNEL

BOARD OF WATER WORKS TRUSTEES

Chairperson	Martin L. Brooks	term expires June 30, 2025
Trustee	Carl L. Heinrich	term expires June 30, 2021
Trustee	Maureen R. Kruse	term expires June 30, 2022
Trustee	Michael J. Wallner	term expires June 30, 2022
Trustee	Caitlin A. Beresford	term expires June 30, 2024

STAFF

CEO and General Manager: Douglas P. Drummey Iowa Grade IV Operator

Administrative Assistant: Celestine Powell ---

Staff Engineer: Brian T. Cady Iowa Grade IV Operator

PURIFICATION DEPARTMENT

Purification Manager: John M. Meads Iowa Grade IV Operator

Coordinator: ---

Personnel: Rodney A. Scott Iowa Grade IV Operator

Timothy C. Parker Iowa Grade IV Operator Joseph S. Rhoades Iowa Grade IV Operator Brandon L. Wear Iowa Grade III Operator Ian J. Cassidy Iowa Grade III Operator Ketrick E. Dilworth Iowa Grade II Operator Cody R. Weddon Iowa Grade II Operator

DISTRIBUTION & METER SERVICES DEPARTMENT

Director: William E. Wiggins Jr. Iowa Grade IV Operator

Supervisor: Josh W. Ryan Iowa Grade II Operator
Coordinator: Douglas L. Adkins Iowa Grade II Operator

Engineering Technician: Karen R. Cedeno-Perdue ---

Distribution Personnel: Matthew L. Farrell Iowa Grade II Operator

Jeffry A. Schuster Iowa Grade II Operator Robert D. Hildreth Iowa Grade II Operator Michal J. Tornblom Iowa Grade II Operator Kyle W. Newsom Iowa Grade II Operator Sammy J. McNeal Iowa Grade I Operator Jacob J. Slobodnik Iowa Grade I Operator Brian O. Guthrie Iowa Grade I Operator Timothy R. Rhoades Iowa Grade I Operator

Jeffrey S. Chanley Chad D. Underwood Tylor L. Story

Meter Personnel: Russell D. Osbahr

Kenny C. McKeighan Chad M. Springer Travis M. Black Jordan D. Freeman

FACILITIES & GROUNDS DEPARTMENT

Director: Raymond P. Stevens Iowa Grade IV Operator

Coordinator: Phil V. Kinart Iowa Grade III Operator

Personnel: Elden D. Tackett Iowa Grade II Operator

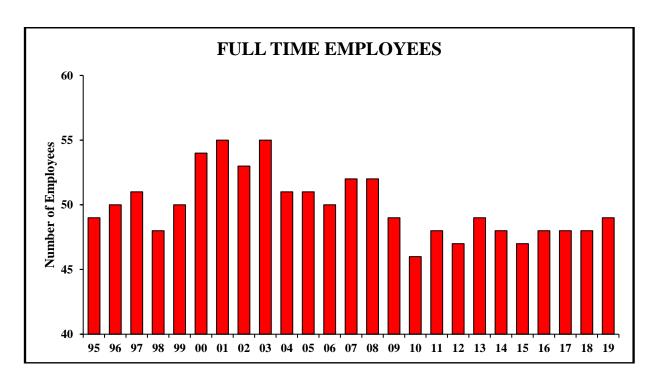
Mark P. Applegate James L. Smith Jr. Joseph A. Masker Shane E. Ruckman Frank J. Bouska Jr. Andrew D. Diller Matthew B. Truax Robert J. Sekera

CUSTOMER SERVICE & ACCOUNTING DEPARTMENT

Administrative Manager: Karen A. Wisniski

Personnel: Travis P. Anderson

Lisa A. Hammer Loni N. Neve Amy M. Driver Alyssia J. Wiebold



HIGHLIGHTS AND STATISTICS

PURIFICATION DEPARTMENT

The Purification Department's primary responsibility is to produce safe drinking water in compliance with all Federal and State Drinking Water Standards. The Council Bluffs Water Works delivered 3,944,535,000 gallons of potable water to our customers in 2019. The Narrows Water Purification Plant produced 2,929,242,000 gallons for an average of 8.025 million gallons per day. The Council Point Water Purification Plant produced 1,015,293,000 gallons for an average of 2.782 million gallons per day. In typical fashion, our peak month occurred during the summer in July, when more than 436,000,000 gallons of water was pumped to the system at an average daily flow of 14.064 million gallons of water per day. The peak day occurred on July 20th, when 16,767,000 gallons was pumped to the system.

The Purification Department received a new Lime Slaker in 2019. The system is used for lime softening. Lime-softening, is a water treatment process used to remove hardness from the water. It utilizes the addition of lime solution (calcium hydroxide) to increase the pH of the water resulting in the precipitation calcium and magnesium ions, the minerals that cause water hardness. The process is also very effective at removing a variety of microorganisms and dissolved organic matter. The new package system consists of a lime feeder, lime slaker, grit remover, piping, valves, instrumentation, and controls to make a complete and functional system. Also known as paste slaker, the machine feeds pebble quicklime into a tub with rotating paddles where water is added to slake the quicklime converting calcium oxide to calcium hydroxide. In 2019, 3,911,000 pounds of lime was fed to treat water delivered to our customers. This machine costs nearly \$200,000 and was installed with our own facilities technicians.

The Council Bluffs Water Works Certified Bacteriological Laboratory processed a total of 2,630 bacteriological samples in 2019. Of the samples processed, 1,453 were for the Council Bluffs Water Works, 800 for other public water supplies, 99 pool samples, and 278 "Special Purpose" samples which consist of samples taken after water main breaks. The Purification Department collected 192 samples for disinfection by-product analysis and 221 Total Suspended Solid (TSS) samples for NPDES/Sanitary Discharge Compliance.

The department also collected samples Unregulated Contaminant Monitoring Rule round 4 (UCMR 4) in 2019. The EPA made amendments to the Safe Drinking Water Act in 1996. The amendments to the Safe Drinking Water Act (SDWA) require that once every five years, the U.S. Environmental Protection Agency (EPA) issue a new list of no more than 30 unregulated contaminants to be monitored by public water systems (PWSs). The Unregulated Contaminant Monitoring Rule (UCMR) provides EPA and other interested parties with scientifically valid data on the occurrence of contaminants in drinking water. This national survey is one of the primary sources of information on occurrence and levels of exposure that the agency uses to develop regulatory decisions for contaminants in the public drinking water supply. The revisions to the Unregulated Contaminant Monitoring Rule (UCMR 4) for Public Water Systems and announcement of public meeting was published in the Federal Register on December 20, 2016. UCMR 4 monitoring will occur from 2018-2020 and includes monitoring for a total of 30 chemical contaminants: 10 cyanotoxins (nine cyanotoxins and one cyanotoxin group) and 20 additional contaminants (two metals, eight pesticides plus one pesticide manufacturing byproduct, three brominated haloacetic acid (HAA) disinfection byproducts groups, three alcohols, and three semi-volatile organic chemicals (SVOCs). UCMR 4 samples have been collected at entry points to the distribution system for all contaminant groups except for the HAAs, which were taken in the distribution system. Sampling for the HAA indicators (TOC and bromide) took place at a single source water influent for each treatment plant. The Council Bluffs Water Works sampling started in January 2019 and completed sampling in 2020.

Throughout the year, the department ran thousands of tests on water quality parameters to maintain the optimal performance of both the Narrows and Council Point Water Purification Plants. To do so, plant operators carefully adjusted the application of numerous water treatment chemicals, including lime, ferric sulfate, liquid chlorine, soda ash, polymer, powder activated carbon, sodium hydroxide, sodium permanganate, hydrochloric acid, anhydrous ammonia, aqua ammonia, phosphate and fluoride in order to provide our customers the highest quality drinking water.

2019 Water Quality Facts and Figures

Narrows Water Purification Plant

Total Gallons Pumped to System	2,929,242,000
Average Gallons Pumped to System (daily)	8,025,000
Maximum Gallons Pumped to System (single day)	12,945,000

Average Gallons Used Per Person Per Day	173	
Source of Water	Missouri River &	
	Missouri River Alluvium	
Finished Water Chemical Analysis		
pH	9.5	Standard Units
Alkalinity	55	mg/L as CaCO ₃
Hardness	162	mg/L as CaCO ₃
Calcium	100	mg/L as CaCO ₃
Magnesium	62	mg/L as CaCO ₃
Non-Carbonate Hardness	107	mg/L as CaCO ₃
Total Chlorine	2.19	mg/L as Cl ₂
Fluoride	0.67	mg/L as F-
Turbidity	0.08	Nephelometric Turbidity Units
Annual Average Temperature (Fahrenheit)	57	degrees
Council Point Water Purification Plant		
Total Gallons Pumped to System	1,015,293,000	
Average Gallons Pumped to System (daily)	2,782,000	
Maximum Gallons Pumped to System (single day)	4,278,000	
Average Gallons Used Per Person Per Day	173	
Source of Water	Missouri River Alluvium	
Finished Water Chemical Analysis		
pН	7.7	Standard Units
Alkalinity	201	mg/L as CaCO ₃
Hardness	165	mg/L as CaCO ₃
Calcium	118	mg/L as CaCO ₃
Magnesium	47	mg/L as CaCO ₃
Total Chlorine	2.26	mg/L as Cl ₂
Fluoride	0.65	mg/L as F-
Turbidity		
	0.08	Nephelometric Turbidity Units
Annual Average Temperature (Fahrenheit)	0.08	Nephelometric Turbidity Units Degrees

The following chemicals and quantities were used to treat our water:

Narrows Water Purification Plant

Water Treatment Chemical	Tons Used	<u> </u>
Lime	1,955.7	\$ 421,656
Ferric Sulfate	171.2	123,241

Soda Ash	237.4	67,512
Liquid Chlorine	79.5	53,602
Sodium Hexametaphosphate	4.4	8,114
Sodium Silicofluoride	7.6	10,555
Polymer	20.5	22,915
Potassium Permanganate	6.1	27,801
Powder Activated Carbon	7.1	8,557
Anhydrous Ammonia	8.8	15,024
Total Water Treatmen	\$1,180,632	

Council Point Water Purification Plant

Water Treatment Chemical	Tons Used	\$ Cost
MCI310 Antiscalant	16.0	\$ 35,119
Aqueous Ammonia	15.6	5,772
Citric Acid	12.0	13,744
Hydrofluosilicic Acid	8.5	4,480
Hydrochloric Acid	284.1	89,503
Ortho-polyphosphate	6.7	6,269
Anionic Polymer	6.2	20,614
Kleen MCT – 105, Low pH	0.4	1,805
Kleen MCT – 405, High pH	0.3	1,348
Sodium Bisulfite	29.5	11,809
Sodium Hydroxide	252.1	81,919
Sodium Permanganate	50.0	80,532
Sodium Chloride	143.6	27,264
Total Water Trea	\$380,178	

DISTRIBUTION DEPARTMENT

The Distribution Department is responsible for the maintenance and operation of all underground facilities in the water distribution system and fire hydrants, including 302.8 miles of water main, 8,056 valves and 2,980 fire hydrants. The department responds to emergency call-outs 24/7 under all weather conditions to repair water main breaks and restore water service to Water Works' customers in a timely manner.

In 2019, the Distribution Department continued with the leak survey of our entire system, and maintained all fire hydrants as a part of our annual hydrant maintenance program. Additionally, our personnel responded to 146 emergency call-outs throughout the year during all hours and weather conditions to ensure continued water service to our customers.

The Distribution Department's water main replacement efforts this year continued in support of city street and sewer replacement projects. Water mains were also added in new developments. Department personnel repaired approximately 2,894 square yards of Portland Cement Concrete (PCC) paving, and 314 square yards of asphalt overlay was installed by various contractors.

This year the department:

Made 109 small taps, and 18 purification taps

Replaced/Killed 86 lead services

Checked 517 service leaks

Turned on/off 108 services

Repaired 62 service lines and 138 curb boxes

Replaced 35 services from the main to stop box

3 services were moved for construction by Water Works personnel

53 services were connected by contractors

Killed 49 services at the main and 4 at the curb stop

Answered 8,249 requests for service line or main location

Turned 482 large valves, rebuilt 3, replaced 3 and added 3 new valves

Installed 42 additional valves with Water Works mains

Repaired 62 main breaks, moved 1 water main

Repaired 24 valve boxes

Made 7 large taps (4 inches and above)

Removed 13 fire hydrants from service which were obsolete, damaged or for main replacement

5 hydrants were replaced by Water Works personnel

4,108 hydrants were checked and listened to while performing leak survey

Checked 4,108 hydrants

Repaired 60 hydrants

Relocated 1 hydrant

Flushed 165 hydrants

Thawed out 32 fire hydrants

Observed installation of 6,153 feet of new mains installed by contractors.

Mains installed by the Distribution Department were:

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18 feet of 6 - inch main
815 feet of 8 - inch main
1,980 feet of 12 - inch main
8 feet of 24 - inch main
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Mains installed by contractors were:

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5 feet of 4 - inch main
2,248 feet of 6 - inch main
1,848 feet of 8 - inch main
94 feet of 10 - inch main
1,958 feet of 12 - inch main
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METER SERVICES DEPARTMENT

The Meter Department's primary function is to read over 22,000 water meters on a monthly and bi-monthly basis, repair and replace meters as needed, complete disconnect and reconnect orders, collect delinquent accounts and respond to service call requests as needed.

In 2019, the Meter Department continued to upgrade and exchange 65 water meters as part of our meter replacement program. While continuing to maintain and upgrade the Water Works' 22,000 plus water meters, we installed an additional 169 radio read meters to improve meter reading efficiency.

In addition to the meter exchanges this year the department:

Replaced 117 dead meters Removed 12 meters for demolition Repaired 48 leaking meters Replaced 94 frozen meters 5 curb boxes were raised Installed 197 touch pads Installed 169 radio reading devices Exchanged 165 radio reading devices Exchanged 145 radio reading batteries Set 146 new addresses with meters Set 22 new addresses with large meters Exchanged 165 small meters Exchanged 9 large meters 65 meters were exchanged for the Meter Exchange Program There were a variety of 1,767 non-scheduled orders 213 meters were tested for accuracy or malfunction Wired 120 new construction homes Rewired 71 existing customer homes Monitored 345 new construction homes Checked 45 homes for low water pressure Surveyed 120 accounts for leaks Set and Removed 113 Hydrant Meters Performed 3,097 final readings Read 3,413 RMMS (Reading Meter Management System) Researched 214 high bill orders Verified 73 meter readings 1.390 notes were left to read the meter Turned on 561 delinquent accounts for Customer Service 6,182 cards were left for delinquent accounts Turned on 981 water services Turned off 822 water services Inspected Pump Stations 1,575

FACILITIES & GROUNDS DEPARTMENT

Investigated 6 water main leaks Investigated 18 service leaks There were 144,828 meter readings

The Facilities and Grounds Department is responsible for the maintenance of all facilities, equipment, buildings and grounds, including the Narrows and Council Point Water Purification Plants, Administration Building, five (5) Booster Pump Stations, four (4) Ground Storage Reservoirs, and five (5) Elevated Storage Tanks. The eleven (11) locations account for approximately 217 acres of land spread throughout the city, along with the equipment at and within those facilities, including but not limited to HVAC systems, pumps and their control systems, telemetry and process monitoring equipment. The Facilities and Grounds crew takes pride in maintaining the appearance of all Water Work's properties and facilities.

Department personnel oversee the daily operations of the storeroom and warehouse. The Inventory Specialist is responsible for the purchase, storage and allocation of material and resources needed for all departments with an inventory value at \$1,133,103.01.

The department maintains the organization vehicle and equipment fleet with over forty (40) pieces of equipment including automobiles, service trucks, dump trucks, backhoes, tractors, mowers, compressors, welders, trailers and specialty equipment used for concrete and water main repair.

Power and fuel are essential to our operations. It took 8,930,213 kWh of electricity at a cost of \$558,420.42 to process and distribute nearly four billion gallons of water. We also used 17,964 gallons of lead free gasoline at a cost of \$38,425.19 and used 10,661 gallons of red diesel fuel at a cost of \$24,630.00 to fuel the Water Works fleet. We used 48,599 thousand cubic feet (MCF) of natural gas at a cost of \$26,281.90 to heat our buildings and structures.

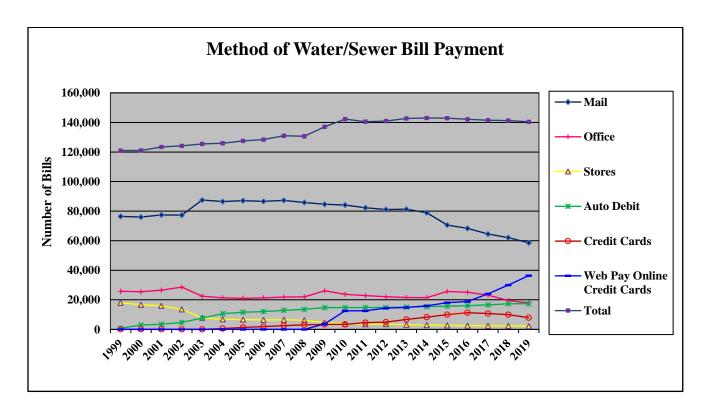
CUSTOMER SERVICE & ACCOUNTING DEPARTMENT

Our Customer Service Representatives do an excellent job assisting Water Works customers with their questions concerning their bills, turning on/off services, signing up for service and paying bills whether it is by telephone or in person. If Customer Service need to send a Service Representative to the customer's location, a service order is prepared for the Meter Department and then processed when the order is completed.

In 2019, the department mailed out 140,729 water bills, and sent 36,135 reminder notices and 20,267 shut-off notices to customers. There were 140,381 payments processed. There were 17,388 automatic bank payments. There were 7,009 service orders processed for final readings, high bills, dead meters, or to install new meters. There were 609 meters installed or replaced. Customer Service Representative made 1,580 payment arrangements with customers. 652 water bills were paid on the day of shut-off and 878 services were discontinued for non-payment. There were 168 returned checks that had to be collected from customers. 4,416 service contracts were processed to transfer, reinstate or add new customers to the system.

The Council Bluffs Water Works continues to see an increase in the number of customers paying their bills on our website. There were 7,876 credit card payments and 36,378 online web credit card payments.

The Accounting Department processed \$20,526,884.56 in receipts and payments in 2019, including processing water and sewer bill payments and making the daily bank deposits. The department is responsible for processing accounts payable invoices, checks, payroll, the budget, fixed assets and other information for the general ledger. The department prepares monthly reports for the Board and other departments. The most recent audit found no irregularities or deficiencies in accounting practices and procedures.



GENERAL INFORMATION

The Council Bluffs Water Works has 22,244 active service accounts: 20,379 residential; 1,865 are commercial or industrial.

Last year, total production was 3,944,535,000 gallons.

Residential customers consumed 1,008,906,888 gallons in 2019. The average residential customer used 49,507 gallons

at a cost of \$268.65 per year or \$22.39 per month.

Our top ten customers consumed 1,489,348,784 gallons, 38% total production.

SERVICES PROVIDED OUTSIDE THE CITY OF COUNCIL BLUFFS, IOWA

650 outside-City customers paid \$426,197.82 for 72,947,204 gallons of water.

The City of Crescent paid \$57,830.75 for 17,946,764 gallons of water.

Regional Water paid \$161,563.20 for 45,738,704 gallons of water.

In total, outside City Customers paid \$645,591.77 for 136,632,672 gallons of water. This represents 5.27% of metered water sales and 3.5% of total water production.

SERVICES PROVIDED TO THE CITY OF COUNCIL BLUFFS, IOWA

The Council Bluffs Water Works provided 45,597,332 gallons of water to the City free of charge, having a value of \$183,514.91. Also, on behalf of the City, the Council Bluffs Water Works collected \$7,414,124.44 in sewer use fees.

TOP TEN CUSTOMERS

	<u>2019 Rank</u>	2018 Rank
1.	Google, Inc. (Council Bluffs)	1
2.	ConAgra Frozen Foods	2
3.	Tyson Foods, Inc.	3
4.	Plumrose USA, Inc.	4
5.	MidAmerican Energy	5
6.	Tetra, LLC	7
7.	City of Council Bluffs	6
8.	Iowa Western Community College	8
9.	Regional Water	9
10.	MHIA Bluffs Acres of CB, L.L.C.	unranked

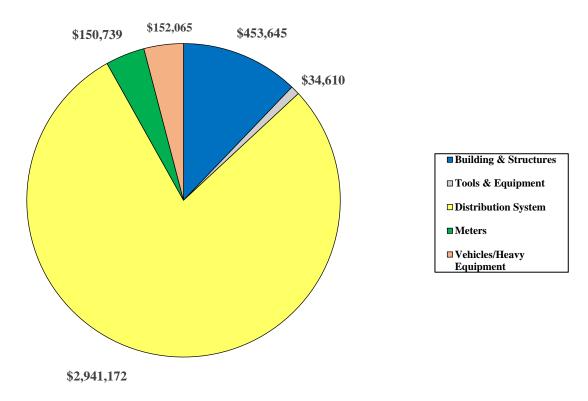
The Council Bluffs Water Works has 302.82 miles of water mains consisting of:

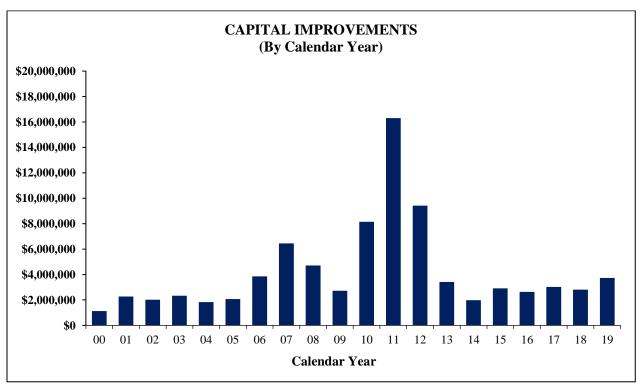
1-inch main	3,192	feet
1 ¼ -inch main	310	feet
1 ½ -inch main	138	feet
2-inch main	1,054	feet
4-inch main	41,664	feet
6-inch main	588,638	feet
8-inch main	347,361	feet
10-inch main	156,527	feet
12-inch main	240,887	feet
16-inch main	167,840	feet
20-inch main	7,723	feet
24-inch main	20,900	feet
30-inch main	13,638	feet
36-inch main	8,995	feet

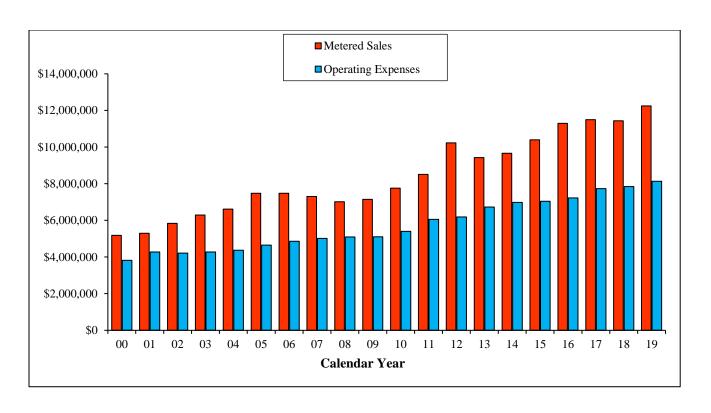
Number of Hydrants: 2,980

Number of Valves: 8,056

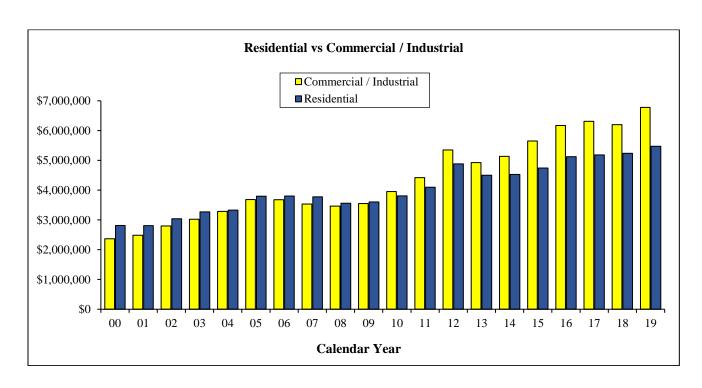
2019 CAPITAL IMPROVEMENTS TOTAL \$3,732,231







METERED SALES vs OPERATING EXPENSES



WATER REVENUE

COUNCIL BLUFFS WATER WORKS

PUMPAGE & METERED CONSUMPTION (1,000's Gallons) 2019

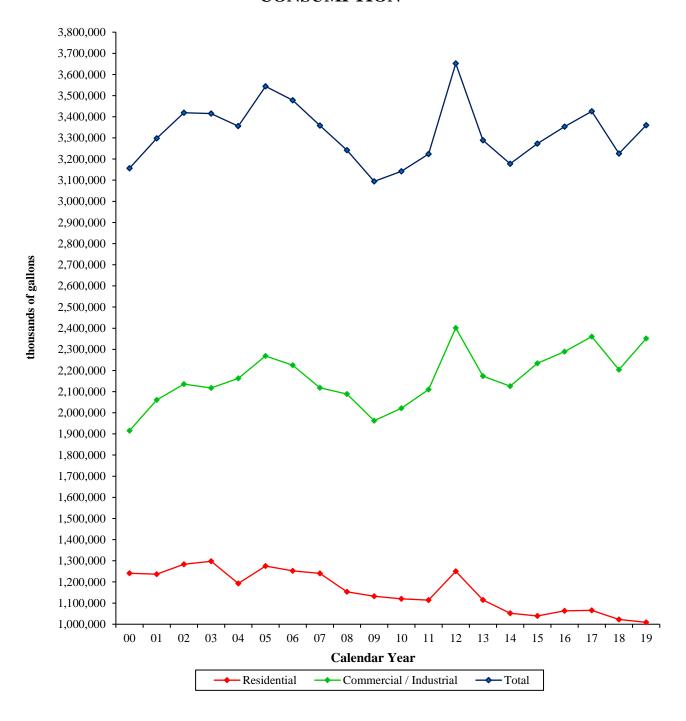
MONTH	PUMPAGE TOTAL	METERED CONSUMPTION TOTAL	CONSUMPTION COMMERCIAL & INDUSTRIAL	RESIDENTIAL
January	302,154	225,522	151,599	73,923
February	277,971	229,304	151,454	77,850
March	320,614	225,683	152,991	72,692
April	311,786	247,723	174,420	73,303
May	323,164	258,251	182,830	75,421
June	348,473	297,860	212,523	85,337
July	436,263	363,919	276,705	87,214
August	404,484	397,771	274,108	123,663
September	349,136	334,551	238,331	96,220
October	316,282	289,102	196,068	93,034
November	280,612	253,487	179,129	74,358
December	273,596	236,976	161,084	75,892
Totals 2019	3,944,535	3,360,149	2,351,242	1,008,907
Ratio		85.2%	59.6%	25.6%
Totals 2018	3,779,251	3,225,810	2,203,487	1,022,323
Ratio		85.4%	58.3%	27.1%
Totals 2009	3,730,721	3,094,281	1,962,132	1,132,149
Ratio		82.9%	52.6%	30.3%

COUNCIL BLUFFS WATER WORKS METERED SALES (\$) 2019

MONTH	TOTAL	COMMERCIAL & INDUSTRIAL	RESIDENTIAL
January	\$ 842,168	\$ 447,996	\$ 394,172
February	862,056	446,833	415,223
March	862,511	456,546	405,965
April	924,995	501,132	423,863
May	953,775	537,117	416,658
June	1,076,630	609,610	467,020
July	1,242,446	776,702	465,744
August	1,404,737	772,816	631,921
September	1,189,079	681,616	507,463
October	1,060,520	557,941	502,579
November	931,055	516,869	414,186
December	901,220	471,161	430,059
Totals 2019	\$ 12,251,192	\$ 6,776,339	\$ 5,474,853
Ratio		55.3%	44.7%
Totals 2018	\$ 11,435,454	\$ 6,197,776	\$ 5,237,678
Ratio		54.2%	45.8%
Totals 2009	\$ 7,148,031	\$ 3,547,546	\$ 3,600,485
Ratio		49.6%	50.4%

RESIDENTIAL VERSUS COMMERCIAL / INDUSTRIAL

CONSUMPTION



HISTORY

Construction of the Council Bluffs Water System began in 1881 by the American Construction Company of New York City, which had been granted a 25-year franchise by the City of Council Bluffs. Under the franchise, the American Construction Company was to construct and operate a water system. The system constructed was very inferior, and during the life of the franchise, practically no improvements or extensions were made. As a result, along with the poor service rendered by the water company, the renewal of the franchise was rejected by the voters in 1906. In 1911, the City acquired the water system through condemnation proceedings at a cost of \$510,000. On June 1, 1911, the control of the Council Bluffs Water Works came under the Board of Water Works Trustees, which had been appointed by the Mayor. Their first task was to reconstruct or replace practically the entire system. The utility remains under the control of a five-member Board of Trustees, appointed by the Mayor on alternate terms of six years each. Many physical changes have occurred within the water system itself. The system in 1911 consisted of obtaining water from the Missouri River near North 37th Street, settling in large reservoirs, disinfecting, and pumping. Disinfection was begun in 1910 which eliminated illness and deaths from typhoid. In 1952, a conventional lime softening water treatment plant, known as the Narrows was constructed at North 25th Street. The Administration Building was relocated to North 25th Street in 1974. In the ensuing thirty years many other improvements have been made including the construction of the 2,000,000 gallon Valley View Reservoir, a Distribution/Meter Department Office and Warehouse Complex, a 1,500,000 gallon Clearwell, a modern Chlorine Handling Facility, 3 Elevated Storage Tanks, two Pump Stations and one storage reservoir. In 2010 Board began construction of a new groundwater source of supply and integrated membrane water treatment plant known as Council Point, on the south side of the City. This new source of supply began serving the City in 2013.

GENERAL DESCRIPTION OF SYSTEM OPERATIONS

The Narrows Water Purification Plant's main source of water is the Missouri River. Four low service pumps are located at the intake pump station. #1 pump is rated at 12.5 million gallons per day (MGD) and is a dual drive pump (electric or gas engine). #2 pump is rated at 5.5 MGD. #3 pump is a variable speed with a maximum capacity of 9.0 MGD. #4 pump is also variable speed with a maximum capacity of 12.5 MGD. Any single pump can be run from a standby generator if commercial power fails.

The secondary source of water is the Missouri River Alluvium. Two wells at a depth of 150 feet have a capacity of 4.5 MGD each.

Traveling screens at the Intake Pump Station remove large debris before it is pumped to twin preliminary settling basins where the sand and heavy silt settle out. Polyelectrolytes are added when necessary to enhance the settling process. Well water is blended with the cold river water in the winter to minimize icing problems within the basins. Water then flows by gravity through the remaining treatment steps.

There are two independent treatment trains at the purification plant. Typically, the plant operates in a split treatment mode where lime is added to approximately 70% of the water to elevate the pH sufficiently to precipitate magnesium and calcium ions. This softened water is blended with un-softened water as needed to adjust the pH and hardness of the water. Soda Ash and Ferric Sulfate are added as required to complete the coagulation and softening process. A series of mixers and flocculators ensure a complete chemical reaction prior to the clarification basins. Solids are recycled to the mixers as a catalyst for the chemical reactions.

Water then flows to 8 gravity multi-media filters. Each filter has a rated capacity of 3.0 MGD. The filters remove any remaining particles. The filters have a granular activated carbon cap that remove dissolved organic compounds and taste and odor causing compounds by adsorption.

Chlorine is added as a disinfectant before and after the filters. Fluoride is added as a prophylaxis. The water then flows through two 1.5 million gallon baffled clearwells to ensure inactivation of microorganisms. Ammonia is then added to convert the chlorine to chloramines to stabilize the chlorine residual and control disinfection by-products.

There are four high service pumps that deliver water to the City. Two of the pumps have a capacity of 10 MGD, one is 7.5 MGD and the smallest is 6 MGD. Pumps can be run in any combination to meet demand. Typical plant discharge pressure is 90 - 100 pounds per square inch. A 500 kW and 100 kW generators provide emergency backup power to the plant in case of commercial power failure.

The Council Point Water Purification Plant's source of water is five wells in the Missouri River alluvium to a depth of 100 feet. The groundwater is pumped to the pretreatment building where it is first aerated to oxidize iron followed by chemical addition to oxidize manganese. Insoluble iron and manganese is removed by ultrafiltration. Dissolved minerals are removed by reverse osmosis. Chlorine is added as a disinfectant. Fluoride is added as a prophylaxis. Finished water is stored in a 3.0 million gallon clearwell. There are three high service pumps that deliver water to the City, each with variable frequency drives and capable of delivering 4.0 MGD. The plant is automated and controlled by the water plant operators from the Narrows Water Purification Plant.

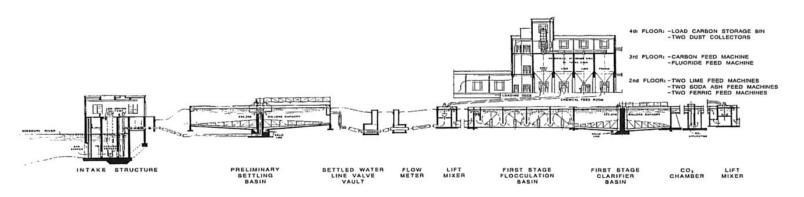
The distribution system has three pressure zones. The first zone is the flat (western and southern) sections of the city and is served by three 2 million gallon reservoirs and one 3-million gallon reservoir. Three of the reservoirs are located downtown and one is located in the southeastern part of the city.

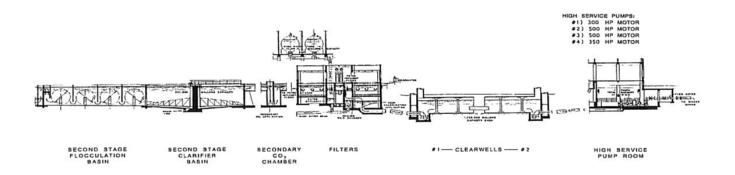
Four booster pump stations and 4 elevated storage tanks with a combined capacity of 1.2 million gallons serve the second pressure zone (bluffs). Lincoln Pump Station has three pumps rated at 600, 750 and 750 gallons per minute (GPM), one is dual drive (electric or gas). Lincoln Pump Station delivers water to the northern section of the City and pumps to a 500,000 gallon elevated tank at Buena Vista Circle and a 200,000 gallon elevated tank at Simms Avenue. Glen Pump Station has three pumps rated at 1500, 800 and 2500 GPM, the largest being a dual drive. This booster pump station delivers to the eastern section of the city and pumps to a 200,000 gallon elevated tank at Memorial Park and a 300,000 gallon tank on Greenview Drive. The Valley View Pump Station has two pumps rated at 750 GPM and 1500 GPM. A gas fired generator provides emergency backup power. This new pump station supports the rapidly growing eastern sections of the city. Oak Street Pump Station has three pumps rated at 400, 700 and 700 GPM, one is a dual drive. This pump station supports both the northern and eastern sections of the bluffs.

A third pressure zone of the distribution system serves the eastern portions of the system. The Airport/Bent Tree pump station has three variable speed pumps each with a maximum capacity of 600 gallons per minute and pump to a 400,000 gallon elevated tank on Highway 6. A gas fired generator provides emergency backup power.

A Supervisory Control and Data Acquisition System monitors all pump station and tank operations from the Water Treatment Plant located on North 25th Street.

WATER TREATMENT PROCESS





Unique Application of Different Technology, Techniques, Materials or Equipment

The CPWTP uses a process which employs the use of semi-permeable membranes (low pressure followed by high pressure) to separate impurities from well water, as shown in Figure 1 below. While membrane technology is not a new technology, the application of low pressure membranes followed by high pressure membranes is a unique application that is a model for other communities to follow. This process has very limited application in the United States and is a unique combination of technology that will serve as a model for other lowa communities.

The CPWTP includes a level of automation that allows remote operation of the facility. Every component of the facility from the raw water supply to the membrane processes and chemical systems is automated, allowing operation from the Narrows WTP through the CBWW SCADA system. The facility is also monitored from the Narrows WTP through CCTV. The processes in operation at the facility can be easily shutdown, started up, and varied, allowing a quick response to system needs. This automation has allowed CBWW to maintain efficient staffing of their treatment facilities, therefore reducing the costs to their customers.

Another unique application of technology is the **on-site chlorine generation**. Salt (very similar to table salt) is delivered to the site and stored as brine solution in large storage tanks. The brine solution is exposed to high level of electrical current in the generators to make a dilute concentration of liquid sodium hypochlorite. The concentration of the chemical is low and the amount generated can be limited to the amount consumed every day or two, so the quantities on site are smaller and the risks from gaseous or liquid chlorine to the employees and neighboring area are greatly reduced.

Figure 1. CPWTP Water Ultra Filtration Treatment Process 3. Low pressure membrane system, 1. Well water is first sent to a strainer ultrafiltration, removes oxidized iron to remove any particles that and manganese particles. Waste may be in the water and could from the low pressure membrane potentially damage the downstream system is sent to a plate settler to membranes. remove solids. Most of the water is 2. Water then is sent to an aerator to then returned to the head of the plant. oxidize iron. Sodium permanganate The solids are sent to the City of is added to oxidize manganese. Council Bluffs waste water treatment 5. The resultant permeate water from the reverse osmosis process is then blended with the remainder of the ultrafiltration filtrate, treated with sodium 4. A portion of the low pressure hydroxide to adjust the pH, fluoride is added, and membrane filtrate is sent to a high then disinfected with sodium hypochlorite and sent pressure membrane system, reverse to clearwell for disinfection contact time. osmosis, for hardness and TDS removal. The high pressure membrane 6. The treated water is pumped into system concentrate stream is discharged to Missouri River. the distribution system. Storage and Pumping

COUNCIL BLUFFS CITY WATER WORKS FINANCIAL STATEMENTS

DECEMBER 31, 2019 AND 2018

(With Independent Auditors' Report Thereon)

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INDEPENDENT AUDITOR'S REPORT

The Board of Trustees Council Bluffs City Water Works Council Bluffs, Iowa

Report on the Financial Statements

We have audited the accompanying financial statements of the Council Bluffs City Water Works, Council Bluffs, Iowa (Water Works) as of and for the years ended December 31, 2019 and 2018, and the related notes to the financial statements, which collectively comprise the Council Bluffs City Water Works' basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America, and the standards applicable to financial audits contained in *Governmental Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Council Bluffs City Water Works, as of December 31, 2019 and 2018 and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (pages 1 through 4), Schedule of the Utility's Proportionate Share of the Net Pension Liability (page 20) and the Schedule of the Utility's Contributions (pages 21 through 22) be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

The Budgetary Comparison Schedule on page 24 has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standard

In accordance with *Government Auditing Standards*, we have also issued our report dated May 13, 2020 on our consideration of the Council Bluffs City Water Works internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Council Bluffs City Water Works internal control over financial reporting and compliance.

Council Bluffs, Iowa May 13, 2020

Hamilton associates, P.C.

MANAGEMENT'S DISCUSSION AND ANALYSIS

Calendar Year Ending December 31, 2019

Council Bluffs Water Works provides this Management's Discussion and Analysis of its financial statements. This narrative overview and analysis of the financial activities is for the calendar year ending December 31, 2019. We encourage readers to consider this information in conjunction with our financial statements, which follow.

FINANCIAL HIGHLIGHTS

- ◆ The Water Works' operating revenues increased 5.5% or \$678,099 from calendar year 2018 to 2019.
- ♦ The Water Works' operating expenses increased by 2.5% or \$283,880, in calendar year 2018 to 2019.
- ◆ The Water Works' net position increased 3.6% or \$1,614,127, from December 31, 2018 to December 31, 2019.

USING THIS ANNUAL REPORT

The annual report consists of a series of financial statements and other information, as follows:

Management's Discussion and Analysis introduces the basic financial statements and provides an analytical overview of the Water Works financial activities.

Financial Statements consist of Statements of Net Position, Statements of Revenues, Expenses, and Changes in Net Position, and Statements of Cash Flows. These provide information about the activities of the Council Bluffs Water Works as a whole and present an overall view of the Water Works finances.

Notes to Financial Statements provide additional information essential to a full understanding of the data provided in the basic financial statements.

Required Supplementary Information further explains and supports the net pension liability and IPERS contributions.

Other Information further explains and supports the financial statement with a comparison of the Water Works' budget for the year.

MANAGEMENT'S DISCUSSION AND ANALYSIS

Calendar Year Ending December 31, 2019

FINANCIAL ANALYSIS

Statements of Net Position

The statements of net position present the assets, liabilities, and net position of the Water Works, as of the end of the calendar year. The purpose of this statement is to present a summary of the Water Works to the readers of the financial statements. The statements of net position include year-end information concerning current assets and liabilities, and net position (assets less liabilities). Readers of the financial statements are able to determine the Water Works financial position by analyzing the increases and decreases in fund equity. This statement is a good source for readers to determine how much the Water Works owes to outside vendors and creditors. The statement presents the available assets that can be used to satisfy those liabilities.

The largest portion of the Water Works' net position 91.3% is the investment in capital assets (building and structures, furniture and fixtures, tools and equipment, distribution system, meters and automotive equipment), less the related debt. The restricted portion of the net position .5% includes resources that are subject to restrictions. The remaining net position 8.2% is the unrestricted position that can be used to meet the Water Works' obligations as they come due.

Statements of Net Position December 31, 2019 and 2018				
		<u>2019</u>		<u>2018</u>
Current assets Restricted assets Capital assets	\$	8,649,703 7,222,000 69,287,604	\$	7,828,634 2,315,350 68,469,550
Total assets	\$	85,159,307	\$	78,613,534
Deferred outflows of resources	\$	389,513	\$	484,897
Current liabilities (payable from current assets) Current liabilities (payable from restricted assets) Revenue bonds payable Other liabilities	\$	3,735,727 6,973,086 24,557,478 3,501,311	\$	3,614,778 2,085,169 24,721,000 3,694,013
Total liabilities	\$	38,767,602	\$	34,114,960
Deferred inflows of resources	\$	342,003	\$	158,383
Net investment in capital assets Restricted Unrestricted	\$	42,394,310 248,915 3,795,990	\$	41,420,844 230,180 3,174,064
Total net position	\$	46,439,215	\$	44,825,088

MANAGEMENT'S DISCUSSION AND ANALYSIS

Calendar Year Ending December 31, 2019

Statement of Revenues and Expenses

The Statement of Revenues and Expenses reflects a positive with an increase in the net assets at the end of the calendar year.

In calendar year 2019, operating revenues increased by \$678,099 or 5.5%, due to a 5% increase in rates and an increase in consumption.

A summary of revenues and expense for the years ending December 31, 2019 and 2018 is presented below:

Statements of Revenues and Expenses December 31, 2019 and 2018				
		<u>2019</u>		<u>2018</u>
Operating revenues	•		•	
Metered water sales	\$	12,246,243	\$	11,481,829
Rental		134,544		145,076
Other		636,867	-	712,650
Total operating revenues	\$	13,017,654	\$	12,339,555
Operating expenses				
Facilities and grounds	\$	973,801	\$	992,962
Inventory adjustment	•	(6,352)	,	(9,859)
Purification		2,265,885		2,118,942
Distribution and meter		1,345,107		1,279,173
Customer accounting		557,416		518,284
Administration and general		2,518,503		2,539,018
Pension and social security		601,513		489,388
Depreciation		3,473,009		3,517,094
Total operating expenses	\$	11,728,882	\$	11,445,002
Nonoperating revenues (expenses)				
Interest on investments	\$	308,077	\$	312,828
Interest expense	Ψ	(779,851)	•	(904,176)
Loss on disposal of equipment		-		(2,604)
Nonoperating revenues, net	\$	(471,774)	\$	(593,952)
Change in net position	\$	816,998	\$	300,601
Total Net Postion		46,439,215		44,825,088

MANAGEMENT'S DISCUSSION AND ANALYSIS

Calendar Year Ending December 31, 2019

Statement of Cash Flows

The Statement of Cash Flows presents information related to cash inflows and outflows, summarized by operating, capital and related financing and investing activities. Cash provided by operating activities include metered water sales, miscellaneous water sales, penalty charges, and service charges. Cash used from capital and related financing activities includes: principal payment of revenue bonds, interest paid on revenue bonds, interest paid on consumer deposits, additions to property, plant, and equipment, and contributions-in-aid of construction. Cash used by investing activities includes interest income.

CAPITAL ASSETS

At December 31, 2019 the Water Works had \$132,898,778 invested in capital assets, net of accumulated depreciation of \$63,611,174. Depreciation expense totaled \$3,473,009 for calendar year 2019. More detailed information about the Water Works' capital assets is presented in Note 4 to the financial statements.

LONG-TERM DEBT

At December 31, 2019, the Water Works had \$26,384,478 debt outstanding. See Note 5 to the financial statements for more information.

ECONOMIC FACTORS

Council Bluffs Water Works continued to support development throughout the community to improve its financial position during the current calendar year.

Facilities and the distribution system operated by Water Works require constant maintenance and upkeep.

Chemical cost, electricity, maintenance of mains and services, and health insurance continue to put pressure on the Water Works resources.

Continued growth in the community requires the Water Works to invest in new infrastructures to meet the growing demands of the community.

Vulnerability and security improvement of our system will be an ongoing process.

CONTACTING THE COUNCIL BLUFFS WATER WORKS FINANCIAL MANAGEMENT

This financial report is designed to provide our customers, investors and creditors with a general overview of the Water Works finances and operating activities. If you have any questions or require additional, information please contact the General Manager, 2000 North 25th Street, P O Box 309, Council Bluffs, Iowa 51502.



COUNCIL BLUFFS CITY WATER WORKS

STATEMENTS OF NET POSITION

December 31, 2019 and 2018

ASSETS	2019	2018
CURRENT ASSETS Cash (Note 2) Inventory	\$ 5,240,178 1,133,103	\$ 4,960,902 968,665
Receivables: Consumer accounts Unbilled revenues	1,466,415 409,626	1,304,609 409,173
Total receivables	\$ 1,876,041	\$ 1,713,782
Prepaid expense Restricted assets (Note 3)	400,381 	185,285 2,315,350
Total current assets	\$ 15,871,703	\$10,143,984
PROPERTY, PLANT AND EQUIPMENT, NET (Note 4)	69,287,604	68,469,550
Total assets	\$ 85,159,307	\$78,613,534
DEFERRED OUTFLOWS OF RESOURCES Pension related deferred outflows (Note 9)	\$ 389,513	\$ 484,897
LIABILITIES		
CURRENT LIABILITIES (payable from current assets): Accounts payable Accrued wages and payroll taxes Accrued compensated absences Accrued interest payable Construction costs payable Retainage payable Due to City of Council Bluffs Current portion of long term debt (Note 5) Total current liabilities (payable from current assets) CURRENT LIABILITIES (payable from restricted assets): Consumer deposits Plant expansion and main extension escrow deposits Accrued interest on consumer deposits	\$ 290,947 146,735 304,077 60,576 187,346 321,469 597,577 1,827,000 \$ 3,735,727 \$ 815,355 5,883,260 274,471	\$ 221,307 133,503 312,215 68,649 396,445 359,261 551,398 1,572,000 \$ 3,614,778 \$ 809,125 1,009,786 266,258
Total current liabilities (payable from restricted assets)	\$ 6,973,086	\$ 2,085,169
LONG TERM DEBT (Note 5)	\$ 24,557,478	\$24,721,000
OTHER LIABILITIES Deferred revenue (Note 6) Net pension liability (Note 9) Total other liabilities	\$ 1,299,840 2,201,471 \$ 3,501,311	\$ 1,326,920 2,367,093 \$ 3,694,013
Total liabilities	\$ 38,767,602	\$34,114,960
DEFERRED INFLOWS OF RESOURCES Pension related deferred inflows (Note 9)	\$ 342,003	\$ 158,383
NET POSITION Net investment in capital assets Restricted Unrestricted	\$ 42,394,310 248,915 3,795,990	\$41,420,844 230,180 3,174,064
Total net position	\$ 46,439,215	\$44,825,088
See Notes to Financial Statements		

COUNCIL BLUFFS CITY WATER WORKS

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

Years Ended December 31, 2019 and 2018

	2019	2018
OPERATING REVENUES		
Metered water sales	\$ 12,246,243	\$ 11,481,829
Rental	134,544	145,076
Other	636,867	712,650
Total operating revenues	\$ 13,017,654	\$ 12,339,555
OPERATING EXPENSES		
Facilities and grounds	\$ 973,801	\$ 992,962
Inventory adjustment	(6,352)	(9,859)
Purification	2,265,885	2,118,942
Distribution and meter	1,345,107	1,279,173
Customer accounting	557,416	518,284
Administration and general	2,518,503	2,539,018
Pension and social security	601,513	489,388
Depreciation	3,473,009	3,517,094
Total operating expenses	\$ 11,728,882	\$ 11,445,002
Operating income	\$ 1,288,772	\$ 894,553
NONOPERATING REVENUES (EXPENSES)		
Interest on investments	\$ 308,077	\$ 312,828
Interest expense	(779,851)	(904,176)
Loss on disposal of equipment		(2,604)
Nonoperating revenues, net	\$ (471,774)	\$ (593,952)
Change in net position	\$ 816,998	\$ 300,601
NET POSITION - BEGINNING	\$ 44,825,088	\$ 43,167,177
Contributions in aid of construction (Note 7)	797,129	1,357,310
NET POSITION - END OF YEAR	\$ 46,439,215	\$ 44,825,088

See Notes to Financial Statements

COUNCIL BLUFFS CITY WATER WORKS

STATEMENTS OF CASH FLOWS

Years Ended December 31, 2019 and 2018

	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash received from customers and users Cash received from other revenues Cash received for easement (Note 6) Cash paid to suppliers for goods and services Cash paid to employees and on their behalf (Payments) receipts for City sewer services net of collections Net cash provided by operating activities:	\$ 12,083,984 744,331 - (4,963,458) (3,477,603) 46,179 \$ 4,433,433	\$ 11,526,199 830,646 1,354,000 (4,587,852) (3,388,306) 84,748 \$ 5,819,435
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES Principal payment of long term debt Long term debt issued Interest paid on long term debt Interest paid on consumer deposits Additions to property, plant, and equipment Plant expansion and main extension escrow deposits Contributions-in-aid of construction Net cash provided by (used in) capital and related financing activities	\$ (1,572,000) 1,663,478 (748,325) (31,385) (4,537,955) 4,873,474 797,129 \$ 444,416	\$ (1,523,000) 145,000 (868,893) (26,899) (4,160,908) (3,786,671) 1,357,310 \$ (8,864,061)
CASH FLOWS FROM INVESTING ACTIVITIES Interest received on investments Net cash provided by investing activities	308,077 \$ 308,077	312,828 \$ 312,828
NET INCREASE (DECREASE) IN CASH	\$ 5,185,926	\$ (2,731,798)
CASH - BEGINNING OF YEAR	7,276,252	10,008,050
CASH - END OF YEAR	\$ 12,462,178	\$ 7,276,252
RECONCILIATION TO BALANCE SHEETS Cash Cash included in restricted assets	\$ 5,240,178 7,222,000 \$ 12,462,178	\$ 4,960,902 2,315,350 \$ 7,276,252
RECONCILIATION OF OPERATING INCOME TO NET		
CASH PROVIDED BY OPERATING ACTIVITIES: Operating income (loss) Adjustments to reconcile operating income to net cash provided by operating activities:	\$ 1,288,772	\$ 894,553
Depreciation Changes in assets and liabilities:	3,473,009	3,517,094
(Increase) Decrease in inventory (Increase) Decrease in receivables (Increase) Decrease in prepaid insurance (Increase) Decrease in deferred outflows of resources Increase (Decrease) in accounts payable Increase (Decrease) in salaries payable Increase (Decrease) in accrued compensated absences Increase (Decrease) in due to City of Council Bluffs Increase (Decrease) in deferred revenue Increase (Decrease) in net pension liability	(164,438) (162,259) (215,096) 95,384 69,640 13,232 (8,138) 46,179 (27,080) (165,622)	(121,871) 44,370 (48,575) 104,738 35,756 20,818 (2,961) 84,748 1,326,920 (96,315) 13,765
Increase (Decrease) in consumer deposits Increase (Decrease) in deferred inflows of resources	6,230 183,620	13,765 46,395
Net cash provided by operating activities	\$ 4,433,433	\$ 5,819,435
. Tot das. Promata by operating detailed	Ψ 1,100,400	Ψ 0,010,400

See Notes to Financial Statements

NOTES TO FINANCIAL STATEMENTS

Years Ended December 31, 2019 and 2018

1. Summary of Significant Accounting Policies

The Council Bluffs City Water Works ("Water Works") is a related organization to the City of Council Bluffs, Iowa ("City") and is not included in the City's financial statements. The Mayor, with City Council concurrence, appoints individuals to the Water Works' Board of Trustees. The Water Works' Board of Trustees maintains oversight responsibility and, therefore, is responsible for selection of management personnel and all financial matters. The authority to adopt the annual budget, to incur debt and to fix rates and charges is vested in the Board of Trustees. The Water Works is exempt from state and Federal income taxes. The Water Works' financial statements are prepared on the accrual basis.

Reporting Entity:

For financial reporting purposes, the Water Works has included all funds, organizations, agencies, boards, commissions and authorities. The Water Works has also considered all potential component units for which it is financially accountable and other organizations for which the nature and significance of their relationship with the Water Works are such that exclusion would cause the Water Works' financial statements to be misleading or incomplete. The Governmental Accounting Standards Board has set forth criteria to be considered in determining financial accountability. These criteria include appointing a voting majority of an organization's governing body and 1) the ability of the Water Works to impose its will on that organization or 2) the potential for the organization to provide specific benefits to or impose specific financial burdens on the Water Works. The Water Works has no component units which meet the Governmental Accounting Standards Board criteria.

Basis of Presentation:

The accounts of the Water Works are organized as an Enterprise Fund. Enterprise Funds are used to account for operations (a) financed and operated in a manner similar to private business enterprises, where the intent of the governing body is the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges or (b) where the governing body has decided periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability or other purposes.

The Statement of Net Position presents the Water Works assets and liabilities, with the difference reported as net position. Net position is reported in the following categories:

Net investment in capital assets – Consists of capital assets, net of accumulated depreciation/amortization and reduced by outstanding balances for bonds, notes and other debt attributable to the acquisition, construction or improvement of those assets.

Restricted – Use of net position is externally imposed.

Unrestricted – The portion of net position that is not in restricted or net of investment in capital assets.

Measurement Focus and Basis of Accounting:

The financial statements are reported using the economic resources measurement focus and accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider are met.

NOTES TO FINANCIAL STATEMENTS

Years Ended December 31, 2019 and 2018

1. Summary of Significant Accounting Policies - Continued

Measurement Focus and Basis of Accounting - Continued:

Water Works distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the Water Works' principal ongoing operations. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

Use of estimates:

In preparing the accompanying financial statements, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents:

For purposes of the statements of cash flows, the Water Works considers all highly liquid instruments with a maturity date of three months or less when purchased to be cash equivalents.

Consumer Accounts Receivable:

The consumer accounts receivable balance includes an assessment for sewer fees, which the Water Works bills on behalf of the City. A corresponding liability represents the amount of consumer accounts receivable that will be remitted to the City upon collection.

Revenues:

Metered water sales include amounts billed to customers on a monthly and bimonthly cycle basis and unbilled amounts based on estimated usage from the latest meter reading to the end of the accounting period.

Valuation of Inventories:

Inventories are valued at the lower of cost (average cost method) or market.

Contributions-in-Aid of Construction and Contributed Capital:

Contributions of cash by governments, customers or developers are maintained by the Water Works as restricted assets and restricted liabilities until expended. When expended the contributor's costs of construction are recorded as property, plant and equipment and contributed capital. Further, a contribution may be in the form of a completed project in which the contributor's costs of construction is recorded directly into the property, plant and equipment and contributed capital accounts. Depreciation expense recognized on these assets is charged to contributed capital.

NOTES TO FINANCIAL STATEMENTS

Years Ended December 31, 2019 and 2018

1. Summary of Significant Accounting Policies - Continued

Property, Plant and Equipment:

Property, plant and equipment are stated at cost. Depreciation is computed using the straight-line method based on estimated useful lives.

Maintenance and repair of property, plant and equipment are charged to operations and major improvements are capitalized. Upon retirement, sale or other disposition of property, plant and equipment, the cost and accumulated depreciation are eliminated from the accounts and gain or loss is included in operations.

Deferred Outflows of Resources:

Deferred outflows of resources represent a consumption of net position that applies to a future period(s) and will not be recognized as an outflow of resources (expense/expenditure) until then. Deferred outflows of resources consist of unrecognized items not yet charged to pension expense and contributions from the employer after the measurement date but before the end of the employer's reporting period.

Accrued Compensated Absences:

Accrued compensated absences represent vacation time, which has been earned by employees in the current year to be used in subsequent years. Sick leave does not vest and, therefore, is not accrued.

Pensions:

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Iowa Public Employees' Retirement System (IPERS) and additions to/deductions from IPERS' fiduciary net position have been determined on the same basis as they are reported by IPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

<u>Deferred Inflows of Resources:</u>

Deferred inflows of resources represent an acquisition of net position that applies to a future period(s) and will not be recognized as an inflow of resources (revenue) until that time. Although certain revenues are measurable, they are not available. Available means collected within the current year or expected to be collected soon enough thereafter to be used to pay liabilities of the current year. Deferred inflows of resources in the financial statements represent the amount of assets that have been recognized, but the related revenue has not been recognized since the assets are not collected within the current year or expected to be collected soon enough thereafter to be used to pay liabilities of the current year. Deferred inflows of resources represents the difference between projected and actual earnings on pension plan investments.

Subsequent Events:

Subsequent events have been evaluated through May 13, 2020, which is the date the financial statements were available to be issued.

NOTES TO FINANCIAL STATEMENTS

Years Ended December 31, 2019 and 2018

2. Cash and Short-Term Investments

Below is a summary of the deposit and investment portfolios that comprise cash and investments on the December 31, 2019 balance sheet including restricted cash and cash equivalents and investments:

Deposits:

At December 31, 2019, deposits consisted of demand deposits and certificates of deposits and had the following balances:

Book Balance	\$ 12,460,378		
Bank Balance	\$ 12,821,061		

Of the total deposits, \$250,000 was covered by federal depository insurance and \$12,571,061 was covered by pledged securities that are being held in the pledging bank's trust department in the Board's name in the form of a joint safekeeping receipt.

3. Restricted Assets

Restricted assets represent money set aside for payment of bonds, proceeds from bond issues to be used for capital improvements, or contributions of cash by governments, customers, or developers for costs of construction. These contributions are reflected as restricted assets until expended. Details of the accounts comprising restricted assets as of December 31, 2019 and 2018 are as follows:

	<u>2019</u>		<u>2018</u>
Consumer deposit fund cash Plant expansion deposit Main extension deposit	\$ 1,135,386 5,987,506 99,108	\$	1,102,349 1,022,077 190,924
	\$ 7,222,000	_\$	2,315,350

4. Property, Plant and Equipment

Property, plant and equipment at December 31, 2019 and 2018 consisted of the following:

	Useful Life in		
<u>Description</u>	<u>Years</u>	<u>2019</u>	<u>2018</u>
Land	-	\$ 3,500,307	\$ 3,500,307
Building and Structures	20 - 50	36,568,955	36,297,925
Water Distribution System	20 - 75	66,339,971	64,320,638
Meters	25 - 40	2,246,957	1,912,122
Tools and Equipment	3 - 20	18,560,059	18,522,840
Automobiles and Trucks	5	1,672,474	1,585,032
Office Equipment	15	104,985	104,985
Work in Progress	-	3,905,070	2,429,506
		\$ 132,898,778	\$ 128,673,355
Less Accumulated Depreciation		(63,611,174)	(60,203,805)
		\$ 69,287,604	\$ 68,469,550

NOTES TO FINANCIAL STATEMENTS

Years Ended December 31, 2019 and 2018

5. Revenue Bonds

In 2010, the Water Works executed the final \$25 million of its \$35.353 million Water Revenue Bonds for construction of a second water treatment facility. The Water Revenue Bonds bear interest at 3.00% due in 2040. In 2019 \$7,416,000 of these bonds were refinanced with an interest rate of 1.75%. The lowa Finance Authority also charges an annual service fee of 0.25%. As of December 31, 2013, the Water Works had drawn down the \$35,353,000.

In 2015, the Water Works issued Water Revenue Bonds in the amount of \$1,200,000 for the purchase of land adjacent to their treatment plant to protect existing wells from potential contamination by farming practices and industries wanting to locate on adjacent property. The bonds are non-interest bearing, and are due in 2034. The Iowa Finance Authority charges an annual service fee of 0.25%.

In 2018, the Water Works issued Water Revenue Bonds in the amount of \$5,025,000 for the construction of a West Broadway transmission water main project. The Water Revenue Bonds bear interest at 1.75% due in 2039. The Iowa Finance Authority also charges an annual service fee of 0.25%. As of December 31, 2019, the Water Works had drawn down \$1,808,478.

All of the bonds require that the Water Works produce and maintain net revenues at a level not less than 110% of the amount of principal and interest on the Revenue Bond falling due in the same year. The Water Works was in compliance with this requirement for the years ended December 31, 2019 and 2018.

Principal and interest requirements to maturity on revenue bonds outstanding at December 31, 2019 are as follows:

Years ended December 31,	Principal	Interest	Total Requirements
2020	\$ 1,827,000	\$ 660,953	\$ 2,487,953
2021	1,883,000	616,726	2,499,726
2022	1,940,000	571,081	2,511,081
2023	2,000,000	524,000	2,524,000
2024	2,058,000	458,698	2,516,698
2025-2029	10,811,478	1,597,271	12,408,749
2030-2034	4,539,000	414,605	4,953,605
2035-2039	1,087,000	135,780	1,222,780
2040	239,000	7,170	246,170
	\$ 26,384,478	\$ 4,986,284	\$ 31,370,762

6. Deferred Revenue

In 2017, the Water Works signed an agreement that provided the buyer exclusive communications easement and non-exclusive access and utility easement for 50 years. In 2018, the Water Works received \$1,354,000 for a 50-year communications easement. Revenue of \$27,080 will be recognized ratable each year over the 50-year agreement period. The deferred revenue balances as of 2019 and 2018 respectively of \$1,299,840 and \$1,326,920 represent remaining cash received that has not yet been recognized.

NOTES TO FINANCIAL STATEMENTS

Years Ended December 31, 2019 and 2018

7. Contributions-in-Aid of Construction and Contributed Capital

The following is a schedule of contributions of cash by governments and customers or developers:

	Other Governments	Customers and Developers	Total
Balances at January 1, 2018	\$ 1,781,508	\$ 4,667,625	\$ 6,449,133
Contributions-in-aid of construction	-	1,357,310	1,357,310
Transfers – Depreciation of contributed property, plant and equipment	(180,100)	(628,872)	(808,972)
Balances at December 31, 2018	\$ 1,601,408	\$ 5,396,063	\$ 6,997,471
Contributions-in-aid of construction	164,672	632,457	797,129
Transfers – Depreciation of contributed property, plant and equipment	(177,453)	(650,674)	(828,127)
Balances at December 31, 2019	\$ 1,588,627	\$ 5,377,846	\$ 6,966,473

8. Risk Management

The Water Works is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Water Works carries commercial insurance for all risks of loss, including errors and omissions, destruction of assets and natural disasters. Settled claims resulting from these risks have not exceeded commercial insurance coverage in any of the past three fiscal years.

The Water Works participates in a partially self-funding benefit plan for its employees' health insurance. The plan is administered by a third-party, which estimates The Water Works maximum annual exposure to be \$576,400. The Water Works contributes funds monthly to a separate bank account to supplement the employee's deductible. The balance in this account as of December 31, 2019 and 2018 was \$84,505 and \$114,833, respectively.

NOTES TO FINANCIAL STATEMENTS

Years Ended December 31, 2019 and 2018

9. Pension Plan

Plan Description:

IPERS membership is mandatory for employees of the Water Works, except for those covered by another retirement system. Employees of the Water Works are provided with pensions through a cost-sharing multiple employer defined benefit pension plan administered by Iowa Public Employees' Retirement System (IPERS). IPERS issues a stand-alone financial report which is available to the public by mail at 7401 Register Drive P.O. Box 9117, Des Moines, Iowa 50306-9117 or at www.ipers.org.

IPERS benefits are established under lowa Code chapter 97B and the administrative rules thereunder. Chapter 97B and the administrative rules are the official plan documents. The following brief description is provided for general informational purposes only. Refer to the plan documents for more information.

Pension Benefits:

A regular member may retire at normal retirement age and receive monthly benefits without an early-retirement reduction. Normal retirement age is age 65, anytime after reaching age 62 with 20 or more years of covered employment, or when the member's years of service plus the member's age at the last birthday equals or exceeds 88, whichever comes first. (These qualifications must be met on the member's first month of entitlement to benefits.) Members cannot begin receiving retirement benefits before age 55. The formula used to calculate a Regular member's monthly IPERS benefit includes:

- A multiplier (based on years of service).
- The member's highest five-year average salary. (For members with service before June 30, 2012, the highest three-year average salary as of that date will be used if it is greater than the highest five-year average salary.)

If a member retires before normal retirement age, the member's monthly retirement benefit will be permanently reduced by an early-retirement reduction. The early-retirement reduction is calculated differently for service earned before and after July 1, 2012. For service earned before July 1, 2012, the reduction is 0.25 percent for each month that the member receives benefits before the member's earliest normal retirement age. For service earned starting July 1, 2012, the reduction is 0.50 percent for each month that the member receives benefits before age 65.

Generally, once a member selects a benefit option, a monthly benefit is calculated and remains the same for the rest of the member's lifetime. However, to combat the effects of inflation, retirees who began receiving benefits prior to July 1990 receive a guaranteed dividend with their regular November benefit payments.

Disability and Death Benefits:

A vested member who is awarded federal Social Security disability or Railroad Retirement disability benefits is eligible to claim IPERS benefits regardless of age. Disability benefits are not reduced for early retirement. If a member dies before retirement, the member's beneficiary will receive a lifetime annuity or a lump-sum payment equal to the present actuarial value of the member's accrued benefit or calculated with a set formula, whichever is greater. When a member dies after retirement, death benefits depend on the benefit option the member selected at retirement.

NOTES TO FINANCIAL STATEMENTS

Years Ended December 31, 2019 and 2018

9. Pension Plan - Continued

Contributions:

Contribution rates are established by IPERS following the annual actuarial valuation which applies IPERS' Contribution Rate Funding Policy and Actuarial Amortization Method. State statute limits the amount rates can increase or decrease each year to 1 percentage point. IPERS Contribution Rate Funding Policy requires the actuarial contribution rate be determined using the "entry age normal" actuarial cost method and the actuarial assumptions and methods approved by the IPERS Investment Board. The actuarial contribution rate covers normal cost plus the unfunded actuarial liability payment based on a 30-year amortization period. The payment to amortize the unfunded actuarial liability is determined as a level percentage of payroll based on the Actuarial Amortization Method adopted by the Investment Board.

In the year ending December 31, 2019, pursuant to the required rate, Regular members contributed 6.29 percent of pay and the Water Works contributed 9.44 percent for a total rate of 15.73 percent.

The Water Works' total contributions to IPERS for the year ended December 31, 2019 and 2018 were \$274,517 and \$252,367, respectively.

Net Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions:

At December 31, 2019 and 2018, the Water Works reported a liability of \$2,201,471 and \$2,367,093, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2019 and June 30, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Water Works' proportion of the net pension liability was based on the Water Works' share of contributions to the pension plan relative to the contributions of all IPERS participating employers. At June 30, 2019, the Water Works' collective proportion was .0380176 percent which was an increase of .000612 percent from its proportion measured as of June 30, 2018. At June 30, 2018, the Water Works' collective proportion was .0374052 percent which was an increase of .000424 percent from its proportion measured as of June 30, 2017.

NOTES TO FINANCIAL STATEMENTS

Years Ended December 31, 2019 and 2018

9. Pension Plan - Continued

Net Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions - Continued:

For the year ended December 31, 2019 and 2018, the Water Works recognized pension expense of \$389,397 and \$319,656, respectively. The Water Works reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources at December 31:

	20	19	2018		
	Deferred Deferred		Deferred	Deferred	
	Outflows of	Inflows of	Outflows of	Inflows of	
	Resources	Resources	Resources	Resources	
Differences between expected and actual experience	\$ 6,103	\$ 79,153	\$ 12,978	\$ 53,500	
Changes of assumptions	235,809	-	337,680	-	
Net difference between projected and actual earnings on pension plan investments	-	248,079	-	65,040	
Changes in proportion and differences between Water Works contributions and proportionate share of contributions	20,068	14,771	8,097	39,843	
Water Works' contributions subsequent to the measurement date	127,533		126,142		
	\$ 389,513	\$ 342,003	\$ 484,897	\$ 158,383	

\$127,533 reported as deferred outflows of resources related to pensions resulting from the Water Works contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions as of December 31, 2019, will be recognized in pension expense as follows:

Year Ended

December 31,	
2020	\$ 43,152
2021	(52,251)
2022	(33,013)
2023	(35,182)
2024	(2,729)
Total	\$ (80,023)

There were no non-employer contributing entities at IPERS.

NOTES TO FINANCIAL STATEMENTS

Years Ended December 31, 2019 and 2018

9. Pension Plan - Continued

Actuarial Assumptions:

The total pension liability in the June 30, 2019 and June 30, 2018 actuarial valuations were determined using the following actuarial assumptions, applied to all periods included in the measurement:

Rate of inflation (effective June 30, 2017)	2.60 percent per annum
Rates of salary increase (effective June 30, 2017)	3.25 to 16.25 percent, average, including inflantion Rates vary by membership group.
Long-term investment rate of return (effective June 30, 2017)	7.00 percent, compounded annually, net of investment expense, including inflation.
Wage growth (effective June 30, 2017)	3.25 percent per annum based on 2.60 percent inflation and .65 percent real wage inflation.

The actuarial assumptions used in the June 30, 2019 and June 30, 2018 valuation were based on the results of actuarial experience studies with dates corresponding to those listed above.

Mortality rates were based on the RP-2000 Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on Scale AA.

The long-term expected rate of return on pension plan investments was determined using a buildingblock method in which best-estimate ranges of expected future real rates (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

		Long-Term
	Asset	Expected Real
Asset Class	Allocation	Rate of Return
Domestic Equity	22%	6.01%
International Equity	15	6.48
Global smart beta equity	3	6.23
Core-plus fixed income	27	1.97
Public Credit	3.5	3.93
Public real assets	7	2.91
Cash	1	(0.25)
Private equity	11	10.81
Private real assets	7.5	4.14
Private credit	3	3.11
Total	100%	

NOTES TO FINANCIAL STATEMENTS

Years Ended December 31, 2019 and 2018

9. Pension Plan - Continued

Discount Rate:

The discount rate used to measure the total pension liability was 7 percent for 2019 and 2018. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the contractually required rate and that contributions from the Water Works will be made at contractually required rates, actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Water Works' Proportionate Share of the Net Pension Liability to Changes in the Discount Rate:

The following presents the Water Works' proportionate share of the net pension liability recorded at December 31, 2019 using the discount rate of 7.0 percent, as well as what the Water Works' proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.0 percent) or 1-percentage-point higher (8.0 percent) than the current rate.

	1%	Discount	1%
	Decrease	Rate	Increase
	(6.0%)	(7.0%)	(8.0%)
Water Works' proportionate share			
of the net pension liability - 2019	\$ 3,909,102	\$ 2,201,471	\$ 769,129

The following presents the Water Works' proportionate share of the net pension liability recorded at December 31, 2018 using the discount rate of 7 percent, as well as what the Water Works' proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.0 percent) or 1-percentage-point higher (8.0 percent) than the current rate.

	1%	Discount	1%	
	Decrease	Rate	Increase	
	(6.0%)	(7.0%)	(8.0%)	
Water Works' proportionate share of the net pension liability - 2018	\$ 4,017,432	\$ 2,367,093	\$ 982,703	

NOTES TO FINANCIAL STATEMENTS

Years Ended December 31, 2019 and 2018

9. Pension Plan - Continued

Pension Plan Fiduciary Net Position:

Detailed information about the pension plan's fiduciary net position is available in the separately issued IPERS financial report which is available on IPERS' website at www.ipers.org.

Payables to the Pension Plan:

At December 31, 2019, the Water Works reported payables to the defined benefit pension plan of \$12,800 for legally required employer contributions and \$8,605 for legally required employee contributions which had been withheld from employee wages but not yet remitted to IPERS. At December 31, 2018, the Water Works reported payables to the defined benefit pension plan of \$11,730 for legally required employer contributions and \$7,828 for legally required employee contributions which had been withheld from employee wages but not yet remitted to IPERS.

10. Commitments

As of December 31, 2019, the Water Works had construction contracts in progress with remaining future commitments totaling \$8,263,796. Funding for these projects is expected to be obtained through drawing down funds on the 2018 Water Revenue Bonds, and contributions in aid of construction from customers and developers.

11. Coronavirus Pandemic

On March 10, 2020 the World Health Organization declared the coronavirus outbreak to be a pandemic. Actions taken around the world to help mitigate the spread of the coronavirus include restrictions on travel, and quarantines in certain areas, and forced closures for certain types of public places and businesses. The coronavirus and actions taken to mitigate it have had and are expected to continue to have an adverse impact on the economies and financial markets of many countries, including the United States. While it is unknown how long these conditions will last and what the complete financial effect will be to the world economy, and the economy of the United States, the State of Iowa and our local economy, the Council Bluffs Water Works is experiencing disruption in daily activities.



SCHEDULE OF THE WATER WORKS' PROPORTIONATE SHARE OF THE NET PENSION LIABILITY

Iowa Public Employee's Retirement System Last Year*, ended June 30

	2019	2018	2017	2016	2015
Water Works' proportion of the net pension liability (asset)	0.0380176%	0.0374052%	0.0369811%	0.0373848%	0.0405283%
Water Works' proportionate share of the net pension liability	2,201,471	2,367,093	2,463,408	2,352,748	1,607,315
Water Works' covered-employee payroll	2,983,267	2,811,350	2,760,458	2,682,875	2,595,093
Water Works' proportionate share of the net pension liability as a percentage of its covered-employee payroll	73.79%	84.20%	89.24%	87.70%	61.94%
Plan fiduciary net position as a percentage of the total pension liability	85.45%	83.62%	82.21%	81.82%	87.61%

^{*} The amounts presented for each year were determined as of June 30.

See accompanying independent auditor's report

Note: GASB Statement No.68 requires ten years of information to be presented in this table. However, until a full 10-year trend is compiled, the Water Works will present information for those years for which information is available.

SCHEDULE OF WATER WORKS' CONTRIBUTIONS

Iowa Public Employee's Retirement System Last Ten Calendar Years, ending December 31 (In Thousands)

	2019		2018		2017		2016	
Statutorily required contributions	\$	275	\$	262	\$	249	\$	243
Contributions in relation to the statutorily required contribution		(275)		(262)		(249)		(243)
Contribution deficiency (excess)	\$		\$		\$		\$	
Water Works' covered-employee payroll	\$	2,912	\$	2,857	\$	2,788	\$	2,720
Contributions as a percentage of covered- employee payroll		9.44%		9.17%		8.93%		8.93%

See accompanying independent auditor's report

SCHEDULE OF WATER WORKS' CONTRIBUTIONS

Iowa Public Employee's Retirement System
Last Ten Calendar Years, ending December 31
(In Thousands)

:	2015	 2014	2013		2012		2011		2010	
\$	235	\$ 234	\$	228	\$	204	\$	181	\$	155
	(235)	 (234)		(228)		(204)		(181)		(155)
\$	-	\$ 	\$		\$		\$		\$	
\$	2,628	\$ 2,620	\$	2,594	\$	2,434	\$	2,409	\$	2,264
	8.94%	8.93%		8.79%		8.38%		7.51%		6.85%

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION - PENSION LIABILITY

Year ended December 31, 2019

1. Changes of benefit terms

Legislation passed in 2010 modified benefit terms for current Regular members. The definition of final average salary changed from the highest three to the highest five years of covered wages. The vesting requirement changed from four years of service to seven years. The early retirement reduction increased from 3 percent per year measured from the member's first unreduced retirement age to a 6 percent reduction for each year of retirement before age 65.

2. Changes of assumptions

The 2018 valuation implemented the following refinements as a result of a demographic assumption study dated June 28, 2018.

- Changed mortality assumption to the RP-2014 mortality tables with mortality improvements modeled using Scale MP-2017.
- Adjusted retirement rates.
- Lowered disability rates.
- Adjusted the probability of a vested Regular member electing to receive a deferred benefit.
- Adjusted the merit component of the salary increase assumption.

The 2017 valuation implemented the following refinements as a result of an experience study dated March 24, 2017:

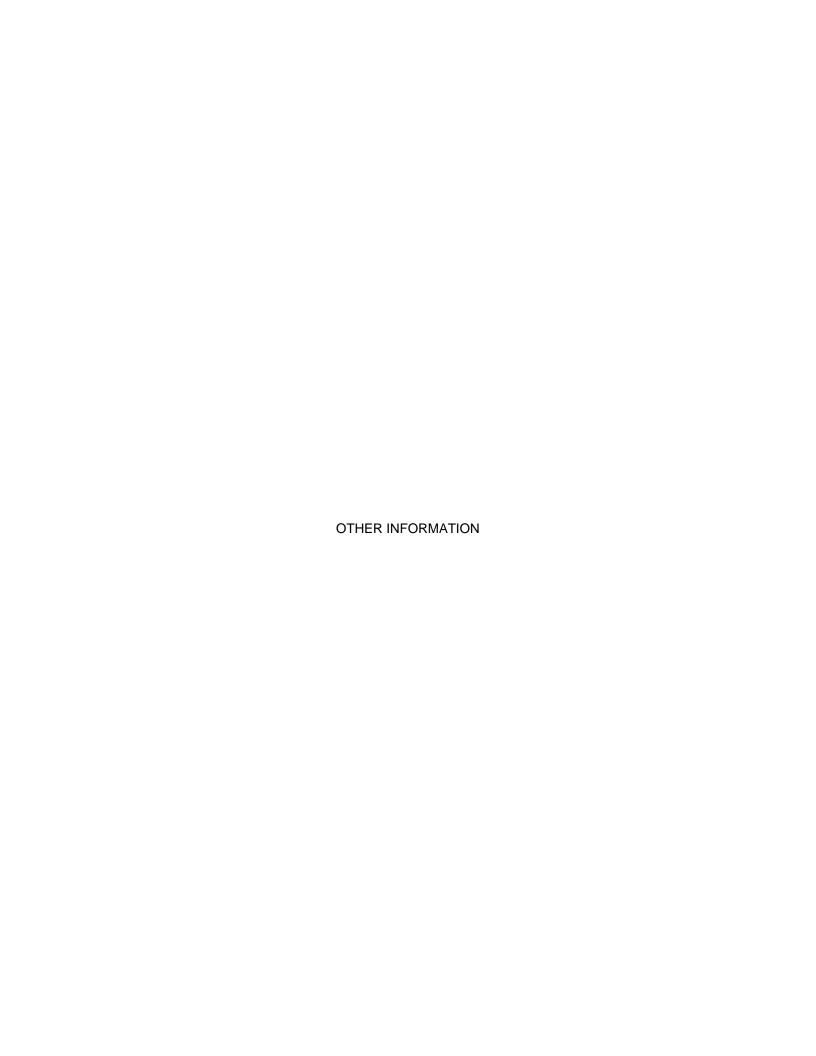
- Decreased the inflation assumption from 3.00 percent to 2.60 percent.
- Decreased the assumed rate of interest on member accounts from 3.75 percent to 3.50 percent per year.
- Decreased the discount rate from 7.50% to 7.00%.
- Decreased the wage growth assumption from 4.00% to 3.25%.
- Decreased the payroll growth assumption from 4.00% to 3.25%.

The 2014 valuation implemented the following refinements as a result of a quadrennial experience study:

- Decreased the inflation assumption from 3.25 percent to 3.00 percent
- Decreased the assumed rate of interest on member accounts from 4.00 percent to 3.75 percent per year.
- Adjusted male mortality rates for retirees in the Regular membership group.
- Reduced retirement rates for sheriffs and deputies between the ages of 55 and 64.
- Moved from an open 30 year amortization period to a closed 30 year amortization period for the UAL beginning June 30, 2014. Each year thereafter, changes in the UAL from plan experience will be amortized on a separate closed 20 year period.

The 2010 valuation implemented the following refinements as a result of a quadrennial experience study:

- Adjusted retiree mortality assumptions.
- Modified retirement rates to reflect fewer retirements.
- Lowered disability rates at most ages.
- Lowered employment termination rates
- Generally increased the probability of terminating members receiving a deferred retirement benefit
- Modified salary increase assumptions based on various service duration.



BUDGETARY COMPARISON SCHEDULE OF REVENUES, EXPENDITURES AND CHANGES IN BALANCES – BUDGET AND ACTUAL

Year ended December 31, 2019

	2019 Actual	2019 Budget	Budget Variance Favorable (Unfavorable)
Operating revenues:	Actual	buuget	(Onlavorable)
Metered water sales	\$12,246,243	\$ 12,280,000	\$ (33,757)
Rental	134,544	122,000	12,544
Other	636,867	634,000	2,867
Culci	000,007		2,007
Total operating revenues	\$13,017,654	\$ 13,036,000	\$ (18,346)
Operating expenses:			
Facilities and grounds	\$ 973,801	\$ 1,105,300	\$ 131,499
Inventory adjustment	(6,352)	5,000	11,352
Purification	2,265,885	2,320,000	54,115
Distribution and meter	1,345,107	1,382,000	36,893
Customer accounting	557,416	481,000	(76,416)
Administration and general	2,518,503	2,699,000	180,497
Pension and social security	487,061	490,000	2,939
Total operating expenses	\$ 8,141,421	\$ 8,482,300	\$ 340,879
Operating income	\$ 4,876,233	\$ 4,553,700	\$ 322,533
Nonoperating revenues (expenses):			
Interest on investments	\$ 308,077	\$ 287,000	\$ 21,077
Interest expense	(779,851)	(825,000)	45,149
Loss on disposal of equipment		(5,000)	5,000
Nonoperating revenues, net	\$ (471,774)	\$ (543,000)	\$ 71,226
Surplus (Deficit) from Operations	\$ 4,404,459	\$ 4,010,700	\$ 393,759
Debt Service	(1,572,000)	(1,572,000)	-
Capital Outlay	(3,740,826)	(6,960,000)	3,219,174
Bond Proceeds	1,663,478	4,500,000	(2,836,522)
Surplus (Deficit)	\$ 755,111	\$ (21,300)	\$ 776,411

Reconcilation to statement of revenues and expenses:

Budget Basis Deficit	\$ 755,111		
Debt Service	1,572,000		
Capital Outlay	3,740,826		
Bond Proceeds	(1,663,478)		
Pension Expense	(114,452)		
Depreciation and Amortization	(3,473,009)		
Excess of revenues over expenses	\$ 816.998		

BUDGETARY COMPARISON SCHEDULE OF REVENUES, EXPENDITURES AND CHANGES IN BALANCES – BUDGET AND ACTUAL

Year ended December 31, 2019

1. Budgetary reporting

In accordance with the Code of Iowa, the Water Works' Board of Trustees adopts a budget following required public notice and hearing. The budget is adopted on a budget basis which consists of accrual basis revenues and expenditures plus cash outlay for debt service and capital improvements and cash receipts of bond proceeds. The annual budget may be amended during the year utilizing similar statutorily prescribed procedures. In 2019, there were no budget amendments and disbursements did not exceed the amount budgeted.



INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH "GOVERNMENT AUDITING STANDARDS"

The Board of Trustees
Council Bluffs City Water Works
Council Bluffs, Iowa

We have audited the financial statements of the Council Bluffs City Water Works as of and for the year ended December 31, 2019 and have issued our report thereon dated May 13, 2020. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

Management of Council Bluffs City Water Works is responsible for establishing and maintaining effective internal control over financial reporting. In planning and performing our audit, we considered the Council Bluffs City Water Works' internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Council Bluffs City Water Works' internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Council Bluffs City Water Works' internal control over financial reporting.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Council Bluffs City Water Works' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*. However, we noted certain immaterial instances of non-compliance or other matters which are described in Part II of the accompanying Schedule of Findings.

Comments involving statutory and other legal matters about the Water Works' operations for the year ended December 31, 2019 are based exclusively on knowledge obtained from procedures performed during our audit of the financial statements of the Water Works. Since our audit was based on tests and samples, not all transactions that might have had an impact on the comments were necessarily audited. The comments involving statutory and other legal matters are not intended to constitute legal interpretations of those statutes.

Council Bluffs City Water Works' Responses to the Findings

The Council Bluffs City Water Works' responses to the findings identified in our audit are described in the accompanying Schedule of Findings. The Water Works' responses were not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on them.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Council Bluffs, Iowa May 13, 2020

Hamilton associates, P.C.

SCHEDULE OF FINDINGS

Year ended December 31, 2019

I. FINDINGS RELATED TO THE FINANCIAL STATEMENTS

None reported

II. OTHER FINDINGS RELATED TO STATUTORY REPORTING

- II-A-18 <u>Certified Budget</u> We compared the Water Works disbursements for the twelve months ended December 31, 2019 with the published budget and found that disbursements did not exceed the amounts budgeted.
- II-B-18 <u>Questionable Disbursements</u> No disbursements that we believe may not meet the requirements of public purpose as defined in an Attorney general's opinion dated April 25, 1979 were noted.
- II-C-18 <u>Travel Expense</u> No expenditures of funds for travel expenses of spouses of Water Works' officials or employees were noted.
- II-D-18 <u>Business Transactions</u> During the course of our audit of Water Works as of December 31, 2019, we looked at many records substantiating disbursements. We noted no business transactions between the Water Works and Water Works' officials or employees.
- II-E-18 Bond Coverage We reviewed the statutory provisions for surety bond coverage of Water Works' officials and employees. The City has an ordinance allowing the City to set bonding requirements for the Water Works. Resolution 83-475 sets the amount of surety bond coverage for board members at \$500 annually. Water Works maintains public officials' liability insurance, which sufficiently meets bond coverage requirements.
- II-F-18 <u>Board Minutes</u> We noted no transactions that we believe should have been approved in the Board minutes but were not.
- II-G-18 <u>Deposits and Investments</u> Chapter 12C of the Code of Iowa, requires that public bodies approve the financial institutions and maximum amounts that may be kept on deposit in each approved depository. The Water Works has an approved depository resolution, however at December 31, 2019, deposits exceeded the maximum amount approved for deposit by \$2,821,061 in one financial institution.

<u>Recommendation</u> – Water works should comply with Chapter 12C of the Code of Iowa and ensure that all deposits are within maximum amounts approved by the depository resolution.

<u>Response</u> – Management will review maximum deposit amounts allowed in the depository resolution and consider requesting the board increase the limits in order to ensure balances remain below authorized amounts.

II-H-18 <u>Revenue Notes</u> – No instances of non-compliance with the revenue bond and note requirements were noted.