2018

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.

Front Cover Photo:

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

CHAIRMAN'S REPORT

In 2018, nearly eighty percent or $2,200,000 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 the City continues the major reconstruction of West Broadway the Board found it necessary to fast track projects to meet the City's schedule. Following additional analysis, the Water Works determined that an alternate route for a new transmission main on Avenue A from 25th Street to 16th Street would result in efficiency of construction and lower overall costs to complete the project. Moving the transmission main from Broadway to Avenue A will result in less disruption in the Broadway corridor in the future. While West Broadway Segment 1 & Segment 2 projects were funded solely through water revenues, in order to accomplish the much larger project scope, the Board issued $5,000,000 in State Revolving Loan Funds at an interest rate of 1.75%.

Maintaining our facilities and equipment is the Board's foremost priority. In 2018, the Board approved additional expenditures for new equipment including a dump truck and vacuum excavator to ensure our distribution staff and employees have the equipment necessary to make water main repairs as timely as possible to limit water service disruptions to our customers. The Administration Building HVAC System was replaced with a high efficiency system. Roofs were replaced on the Intake Structure and Narrows Plant. New energy efficient doors and windows were installed at the Oak Street Pumping Station. We continued our lighting improvement program by upgrading the Distribution/Warehouse Building with energy efficient LED lights. 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 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 system is essential to a community's public health, public safety, economic development and quality of life. The Board of Water Works Trustees and Water Works employees will meet any challenge to fulfill its obligation and mission to our customers to provide a safe, dependable and 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.

Caitlin A. Beresford
Chairperson

Trustees:
Carl L. Heinrich
Martin L. Brooks
Maureen R. Kruse
Michael J. Wallner

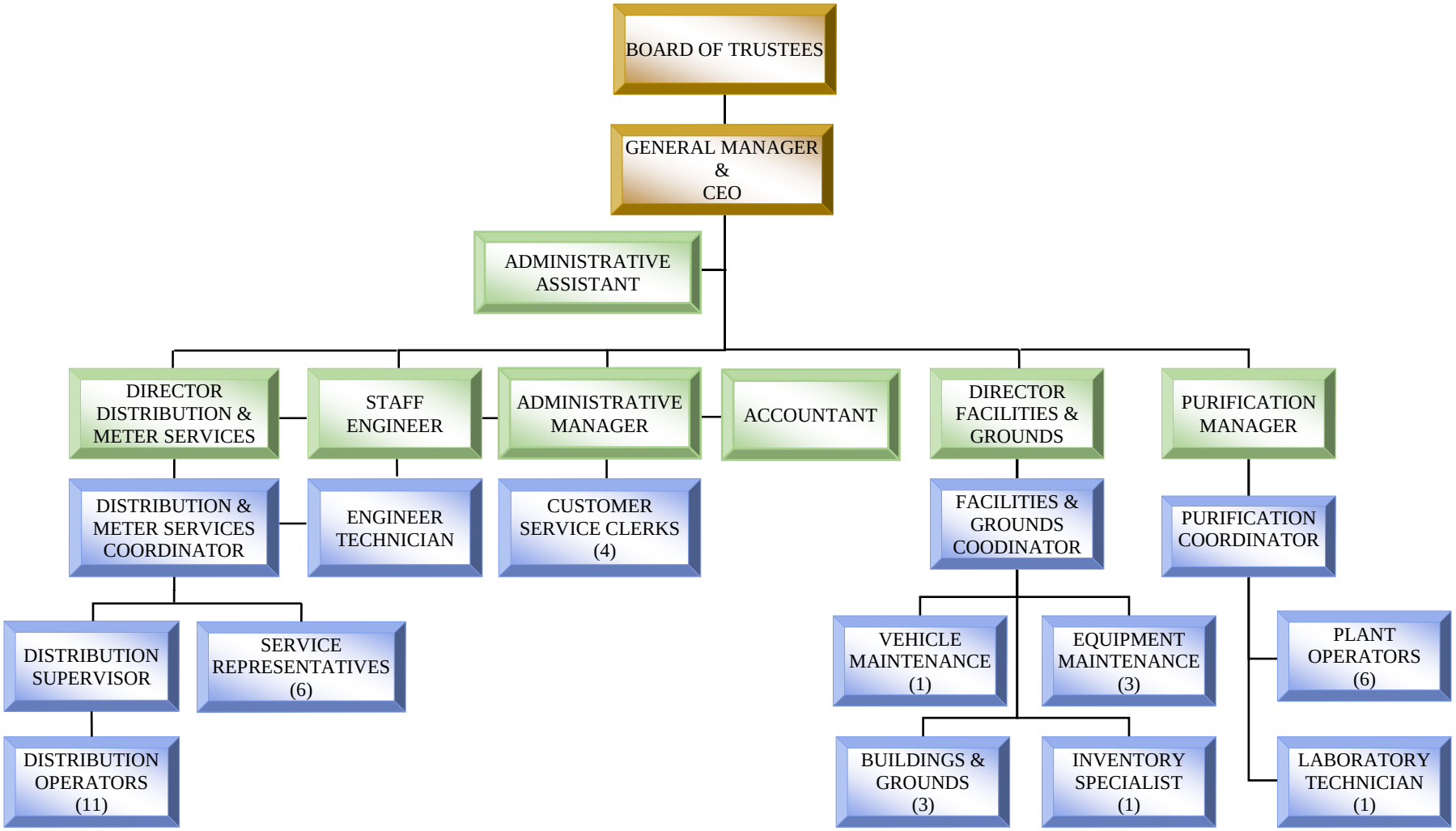
2018
RATE SCHEDULE

Monthly Retail Volume Charges		
	Monthly Billing	
	Inside City ($/CCF)	Outside City ($/CCF)
First 1,500 Cubic Feet	$3.52	$5.28
Next 28,500 Cubic Feet	$2.56	$3.84
Over 30,000 Cubic Feet	$1.62	$2.43

Bi-Monthly Retail Volume Charges		
	Bi-Monthly Billing	
	Inside City ($/CCF)	Outside City ($/CCF)
First 3,000 Cubic Feet	$3.52	$5.28
Next 57,000 Cubic Feet	$2.56	$3.84
Over 60,000 Cubic Feet	$1.62	$2.43

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	Caitlin A. Beresford	term expires June 30, 2024
Trustee	Carl L. Heinrich	term expires June 30, 2021
Trustee	Martin L. Brooks	term expires June 30, 2019
Trustee	Maureen R. Kruse	term expires June 30, 2022
Trustee	Michael J. Wallner	term expires June 30, 2022

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

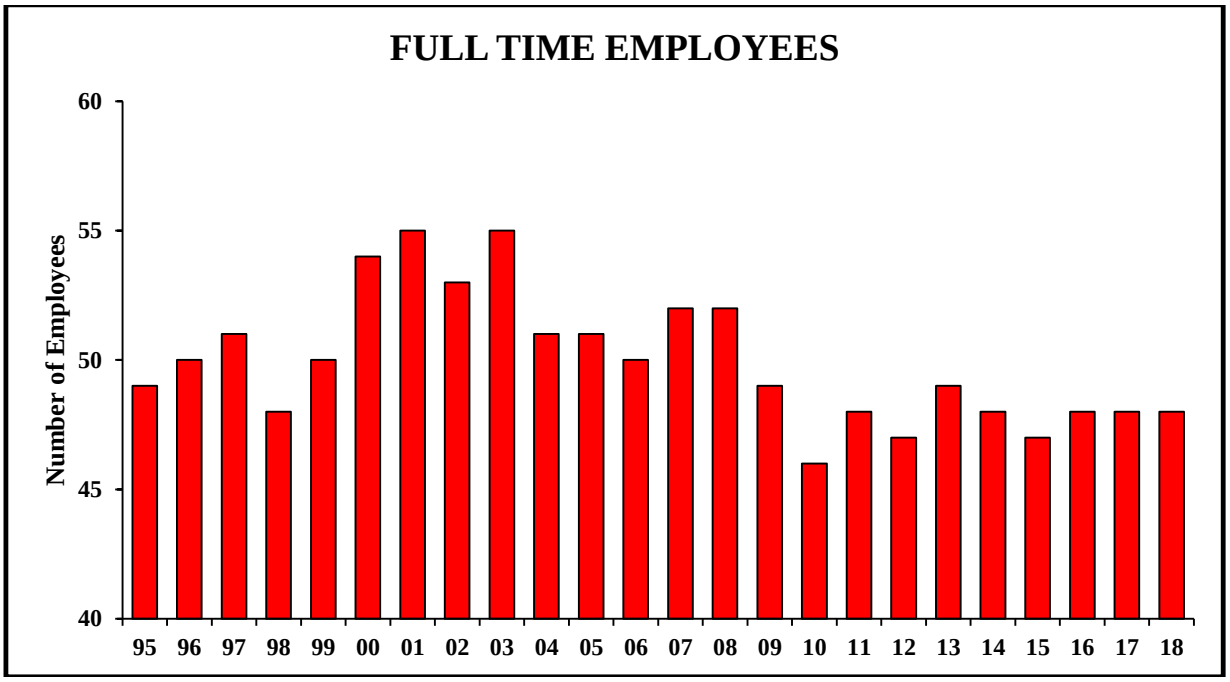
Director:	William E. Wiggins Jr.	Iowa Grade IV Operator
Coordinator:	Douglas P. Adkins	Iowa Grade II Operator
Supervisor:	Josh W. Ryan	Iowa Grade II Operator
Engineering Technician:	Karen R. Cedeno-Perdue	
Distribution Personnel:	Matthew L. Farrell	Iowa Grade II Operator
	Jeffry A. Schuster	Iowa Grade II Operator
	Robert D. Hildreth	Iowa Grade II Operator
	Sammy J. McNeal	Iowa Grade I Operator
	Dustin L. Christensen	Iowa Grade I Operator
	Jacob J. Slobodnik	Iowa Grade I Operator
	Kyle W. Newsom	Iowa Grade I Operator
	Michael J. Tornblom	
	Jeffrey S. Chanley	
	Chad D. Underwood	
	Timothy R. Rhoades	
Meter Personnel:	Stephen J. Ronk	
	Russell D. Osbahr	
	Kenny C. McKeighan	
	Chad M. Springer	
	Brian O. Guthrie	
	Travis M. Black	

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

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 3,779,251,000 gallons of potable water to our customers in 2018. The Narrows Water Purification Plant produced 2,817,311,000 gallons for an average of 7.719 million gallons per day. The Council Point Water Purification Plant produced 961,940,000 gallons for an average of 2.635 million gallons per day. In typical fashion, our peak month occurred during the summer in July, when more than 393,000,000 gallons of water was pumped to the system at an average daily flow of 12.677 million gallons of water per day. The peak day occurred on May 27th when 13,923,000 gallons was pumped to the system.

The Council Bluffs Water Works Certified Bacteriological Laboratory processed a total of 2,601 bacteriological samples in 2018. Of the samples processed, 1,640 were for the Council Bluffs Water Works, 435 for other public water supplies, 111 pool samples, and 415 "Special Purpose" samples which consist of samples taken after water main breaks. The Laboratory Technician also collected 192 samples for disinfection by-product analysis and 221 Total Suspended Solid (TSS) samples for NPDES /Sanitary Discharge Compliance. The laboratory received a new laboratory grade refrigerator/freezer in 2018. The Thermo Scientific GP Series Combination Laboratory Refrigerator/Freezer Combination Unit is an essential piece of laboratory equipment in keeping the Council Bluffs Water Works Laboratory certified by the State of Iowa to perform bacteriological analysis. The GP Series lab refrigerator and freezer delivers the performance, security, and quality needed in a laboratory. The Council Bluffs Water Works Laboratory utilizes the combination unit to preserve and maintain microbiological cultures, media, and samples. It's also utilized to keep freezer packs froze for preservation of samples through shipping.

The department prepared a sampling plan for Unregulated Contaminant Monitoring Rule round 4 (UCMR 4) in 2018. 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 will be collected at entry points to the distribution system for all contaminant groups except for the HAAs, which will be taken in the distribution system. Sampling for the HAA indicators (TOC and bromide) will take place at a single source water influent for each treatment plant. The Council Bluffs Water Works sampling started in January 2019.

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.

2018 Water Quality Facts and Figures

Narrows Purification Plant

Total Gallons Pumped to System	2,817,311,000
Average Gallons Pumped to System (daily)	7,719,000
Maximum Gallons Pumped to System (single day)	11,520,000
Average Gallons Used Per Person Per Day	165

Source of Water	Missouri River & Missouri River Alluvium	
Finished Water Chemical Analysis		
pH	9.2	Standard Units
Alkalinity	60	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	102	mg/L as $CaCO_3$
Total Chlorine	2.18	mg/L as Cl_2
Fluoride	0.69	mg/L as F^-
Turbidity	0.11	Nephelometric Turbidity Units
Annual Average Temperature (Fahrenheit)	56	degrees

Council Point Purification Plant

Total Gallons Pumped to System	961,940,000	
Average Gallons Pumped to System (daily)	2,635,000	
Maximum Gallons Pumped to System (single day)	4,110,000	
Average Gallons Used Per Person Per Day	165	
Source of Water	Missouri River Alluvium	
Finished Water Chemical Analysis		
pH	7.9	Standard Units
Alkalinity	189	mg/L as $CaCO_3$
Hardness	156	mg/L as $CaCO_3$
Calcium	110	mg/L as $CaCO_3$
Magnesium	46	mg/L as $CaCO_3$
Total Chlorine	2.20	mg/L as Cl_2
Fluoride	0.64	mg/L as F^-
Turbidity	0.13	Nephelometric Turbidity Units
Annual Average Temperature (Fahrenheit)	58	Degrees

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

Narrow Water Purification Plant

Water Treatment Chemical	**Tons Used**	**$ Cost**
Lime	1,916.7	$391,601
Ferric Sulfate	206.3	132,665
Soda Ash	257.8	71,900

Liquid Chlorine	78.3	52,853
Sodium Hexametaphosphate	4.5	8,100
Sodium Silicofluoride	6.7	6,819
Polymer	24.9	22,410
Potassium Permanganate	9.4	33,633
Powder Activated Carbon	13.3	16,226
Anhydrous Ammonia	8.4	14,280
Total Water Treatment Chemical Cost		$750,487

Council Point Water Purification Plant

Water Treatment Chemical	**Tons Used**	**$ Cost**
MCI310 Antiscalant	16.3	$ 32,600
Aqueous Ammonia	12.6	3,704
Citric Acid	18.9	16,216
Hydrofluosilicic Acid	9.7	5,219
Hydrochloric Acid	231.5	74,543
Ortho-polyphosphate	7.7	6,591
Anionic Polymer	7.1	23,701
Kleen MCT – 105, Low pH	6.2	29,239
Kleen MCT – 405, High pH	6.1	27,725
Sodium Bisulfite	18.5	9,720
Sodium Hydroxide	226.3	80,269
Sodium Permanganate	48.8	73,883
Sodium Chloride	89.0	15,103
Total Water Treatment Chemical Cost		$398,513

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 miles of water main, 8,041 valves and 2,974 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 2018, 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 152 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 2,374 square yards of Portland Cement Concrete (PCC) paving, and 365 square yards of asphalt overlay was installed by various contractors.

This year the department:

Made 111 small taps, and 17 purification taps
Replaced/Killed 32 lead services
Checked 353 service leaks
Turned on/off 124 services
Repaired 35 service lines and 152 curb boxes
Replaced 18 services from the main to stop box
2 services were moved for construction by Water Works personnel
87 services were connected by contractors
Killed 38 services at the main and 10 at the curb stop
Answered 10,092 requests for service line or main location
Turned 480 large valves, rebuilt 6, replaced 3 and added 2 new valves
Installed 32 additional valves with Water Works mains
Repaired 60 main breaks, moved 4 water mains
Repaired 22 valve boxes
Made 8 large taps (4 inches and above)
Removed 16 fire hydrants from service which were obsolete, damaged or for main replacement
9 hydrants were replaced by Water Works personnel
3,801 hydrants were listened to while performing leak survey
Checked 3,189 hydrants
Repaired 42 hydrants
Relocated 2 hydrants
Flushed 530 hydrants
Thawed out 34 fire hydrants

Observed installation of 7,662 feet of new mains installed by contractors.

Mains installed by the Distribution Department were:

53	feet of 6	– inch main
1,506	feet of 8	– inch main
32	feet of 12	– inch main

Mains installed by contractors were:

10	feet of 4	– inch main
40	feet of 6	– inch main
1,995	feet of 8	– inch main
5,617	feet of 12	– inch main

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 2018, the Meter Department continued to upgrade and exchanged 1,015 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 220 radio read meters to improve meter reading efficiency.

In addition to the meter exchanges this year the department:

Replaced 123 dead meters
Removed 12 meters for demolition
Repaired 37 leaking meters
Replaced 96 frozen meters
Installed 121 touch pads

Installed 220 radio reading devices
Exchanged 87 radio reading devices
Exchanged 167 radio reading batteries
Set 93 new addresses with meters
Set 33 new addresses with large meters
Exchanged 184 small meters
Exchanged 26 large meters
1,015 meters were exchanged for the Meter Exchange Program
There were a variety of 1,029 non-scheduled orders
42 meters were tested for accuracy or malfunction
Wired 119 new construction homes
Rewired 76 existing customer homes
Monitored 403 new construction homes
Checked 53 homes for low water pressure
Surveyed 81 accounts for leaks
Set and Removed 112 Hydrant Meters
Performed 3,083 final readings
Read 2,956 RMMS (Reading Meter Management System)
Researched 284 high bill orders
Verified 207 meter readings
2,020 notes were left to read the meter
Turned on 543 delinquent accounts for Customer Service
5,863 cards were left for delinquent accounts
Turned on 944 water services
Turned off 869 water services
Inspected Pump Stations 1,123
Investigated 4 water main leaks
Investigated 13 service leaks
Investigated 1 fire hydrant
There were 145,150 meter readings

FACILITIES & GROUNDS DEPARTMENT

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 store room 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 $968,664.88.

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 9,118,608 kWh of electricity at a cost of $575,298.43 to process and distribute nearly four billion gallons of water. We also used 18,008 gallons of lead free gasoline at a cost of $41,789.19 and 10,782 gallons of red diesel fuel at a cost of $27,013.65 to fuel the Water Works fleet. We used 55,655 thousand cubic feet (MCF) of natural gas at a cost of $34,995.58 to heat our buildings and structures.

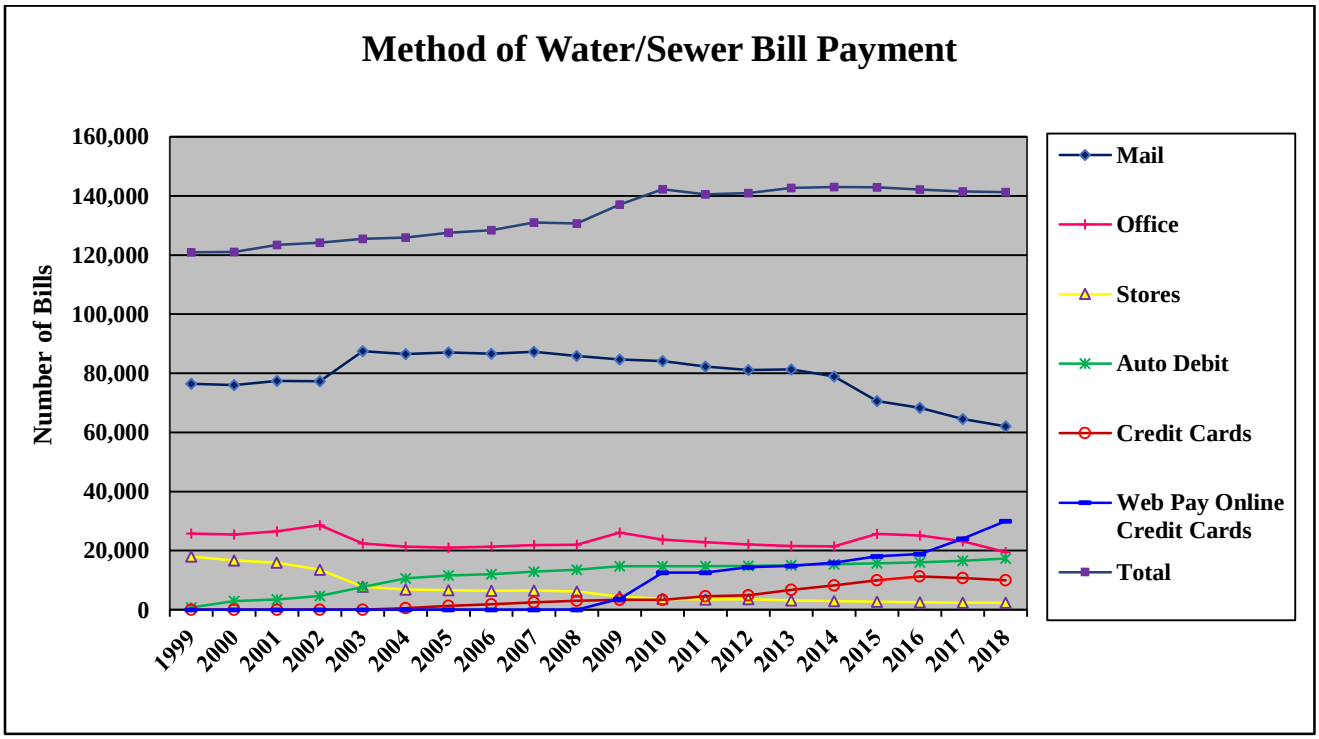
CUSTOMER SERVICE & ACCOUNTING DEPARTMENT

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 2018, the department mailed out 138,958 water bills, and sent 36,875 reminder notices and 20,094 shut-off notices to customers. There were 141,299 payments processed. There were 17,294 automatic bank payments. There were 6,572 service orders processed for final readings, high bills, dead meters, or to install new meters. There were 1,544 meters installed or replaced. Customer Service Representative made 1,365 payment arrangements with customers. 672 water bills were paid on the day of shut-off and 859 services were discontinued for non-payment. There were 181 returned checks that had to be collected from customers. 4,065 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 9,981 credit card payments and 30,038 online web credit card payments.

The Accounting Department processed $19,347,209.11 in receipts and payments in 2018, 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 22,090 active service accounts: 20,247 residential; 1,843 are commercial or industrial.

Last year, total production was 3,779,251,000 gallons.

Residential customers consumed 1,022,323,764 gallons in 2018. The average residential customer used 50,492 gallons

at a cost of $258.69 per year or $21.56 per month.

Our top ten customers consumed 1,324,320,536 gallons, 32% total production.

SERVICES PROVIDED OUTSIDE THE CITY OF COUNCIL BLUFFS, IOWA

647 outside-City customers paid $413,383.58 for 75,020,660 gallons of water.

The City of Crescent paid $59,931.16 for 19,544,492 gallons of water.

Regional Water paid $161,047.17 for 47,931,092 gallons of water.

In total, outside City Customers paid $634,361.91 for 142,496,244 gallons of water. This represents 5.55% of metered water sales and 3.8% of total water production.

SERVICES PROVIDED TO THE CITY OF COUNCIL BLUFFS, IOWA

The Council Bluffs Water Works provided 43,919,568 gallons of water to the City free of charge, having a value of $171,204.38. Also, on behalf of the City, the Council Bluffs Water Works collected $6,763,836.30 in sewer use fees.

TOP TEN CUSTOMERS

2018 Rank		2017 Rank
1.	Google, Inc. (Council Bluffs)	1
2.	ConAgra Frozen Foods	2
3.	Tyson Foods, Inc.	5
4.	Plumrose USA, Inc.	4
5.	MidAmerican Energy	6
6.	City of Council Bluffs	7
7.	Tetra, LLC	8
8.	Iowa Western Community College	10
9.	Regional Water	9
10.	Ameristar Casino	unranked

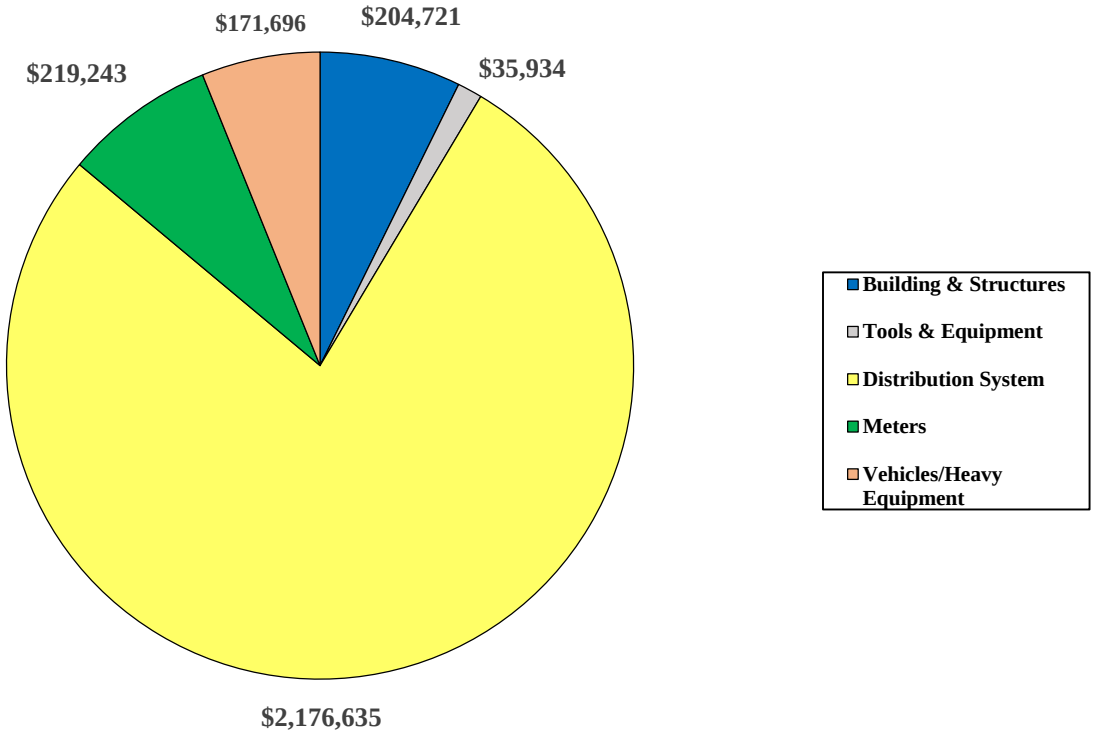
The Council Bluffs Water Works has 302.25 miles of water mains consisting of:

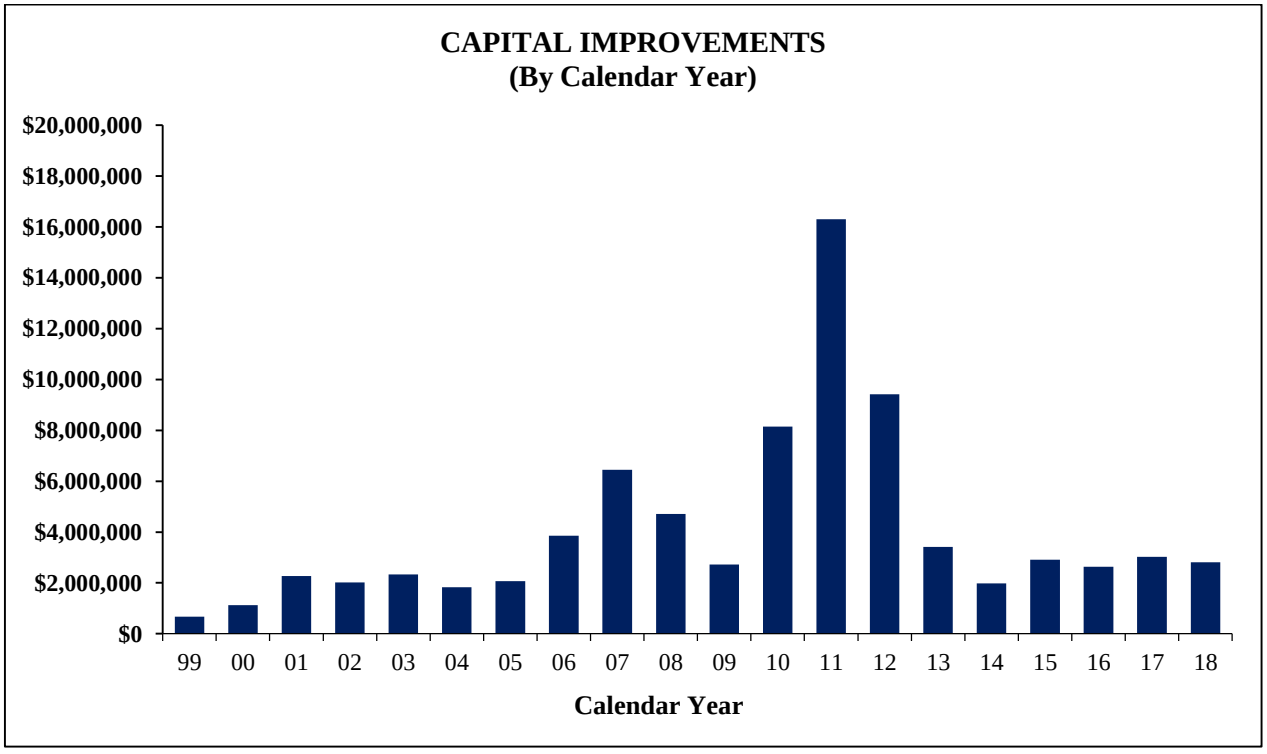
1-inch main	3,192	feet
1 ¼ -inch main	310	feet
1 ½ -inch main	138	feet
2-inch main	1,054	feet
4-inch main	42,336	feet
6-inch main	591,461	feet
8-inch main	344,863	feet
10-inch main	156,512	feet
12-inch main	236,951	feet
16-inch main	167,840	feet
20-inch main	7,723	feet
24-inch main	20,910	feet
30-inch main	13,638	feet
36-inch main	8,995	feet

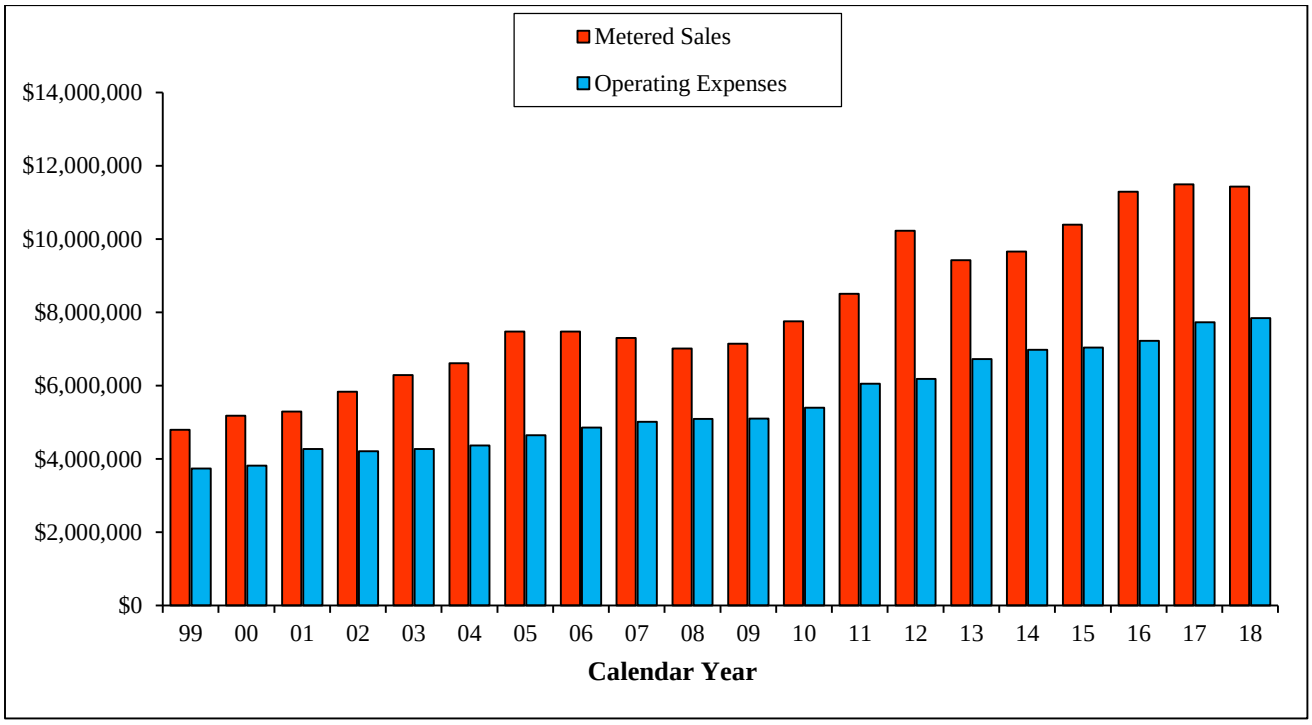
Number of Hydrants: 2,974

Number of Valves: 8,041

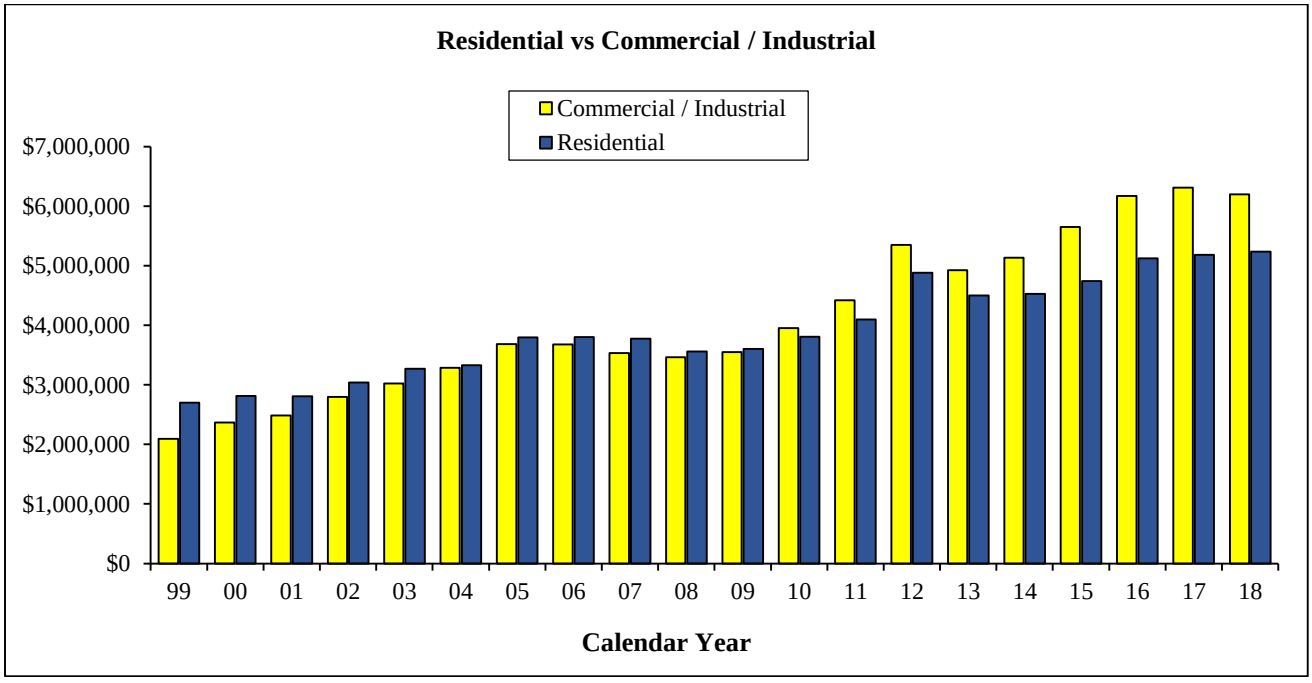
2018 CAPITAL IMPROVEMENTS
TOTAL $2,808,229







METERED SALES vs OPERATING EXPENSES



WATER REVENUE

COUNCIL BLUFFS WATER WORKS

PUMPAGE & METERED CONSUMPTION
(1,000's Gallons)
2018

MONTH	PUMPAGE TOTAL	METERED CONSUMPTION TOTAL	CONSUMPTION COMMERCIAL & INDUSTRIAL	RESIDENTIAL
January	289,381	231,428	156,911	74,517
February	261,195	212,862	140,069	72,793
March	276,781	229,606	157,671	71,935
April	269,069	225,838	151,349	74,489
May	348,908	265,193	191,616	73,577
June	366,506	345,460	237,868	107,592
July	393,292	331,494	236,307	95,187
August	384,016	383,000	259,284	123,716
September	332,056	294,496	206,293	88,203
October	305,790	273,448	184,982	88,466
November	273,350	207,742	131,711	76,031
December	278,907	225,243	149,426	75,817
Totals 2018	3,779,251	3,225,810	2,203,487	1,022,323
Ratio		85.4%	58.3%	27.1%
Totals 2017	4,142,655	3,425,590	2,360,207	1,065,383
Ratio		82.7%	57.0%	25.7%
Totals 2008	3,785,876	3,241,529	2,088,394	1,153,135
Ratio		85.6%	55.2%	30.4%

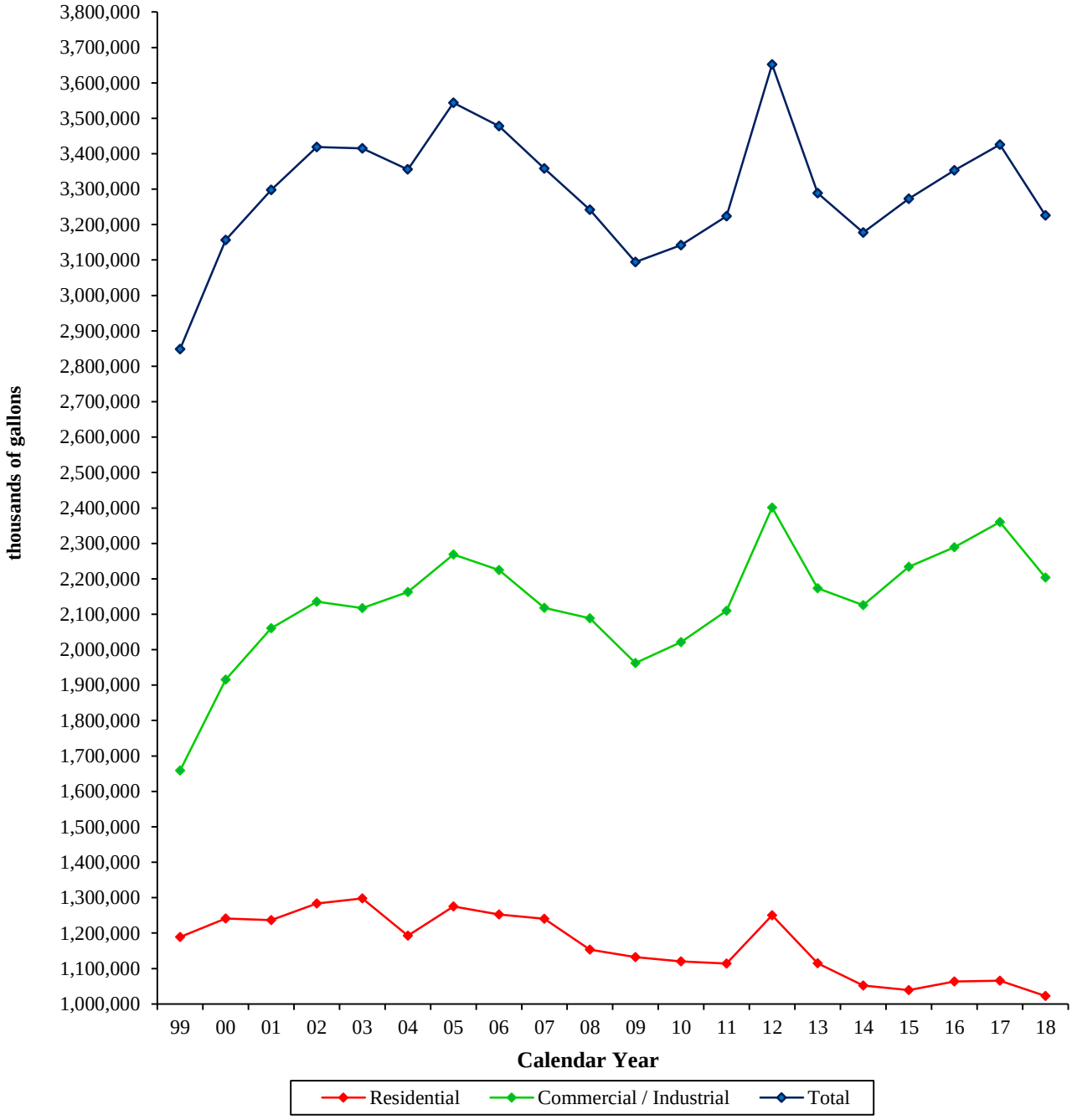
COUNCIL BLUFFS WATER WORKS

METERED SALES ($)
2018

MONTH	TOTAL	COMMERCIAL & INDUSTRIAL	RESIDENTIAL
January	$ 784,611	$ 411,103	$ 373,508
February	763,196	395,366	367,830
March	824,717	441,917	382,800
April	817,505	417,044	400,461
May	911,736	523,623	388,113
June	1,186,415	650,118	536,297
July	1,123,346	646,105	477,241
August	1,296,449	697,042	599,407
September	1,019,626	571,851	447,775
October	969,009	511,559	457,450
November	914,652	515,260	399,392
December	824,192	416,788	407,404
Totals 2018	$ 11,435,454	$ 6,197,776	$ 5,237,678
Ratio		54.2%	45.8%
Totals 2017	$ 11,495,736	$ 6,312,082	$ 5,183,654
Ratio		54.9%	45.1%
Totals 2008	$ 7,020,627	$ 3,462,342	$ 3,558,285
Ratio		49.3%	50.7%

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.

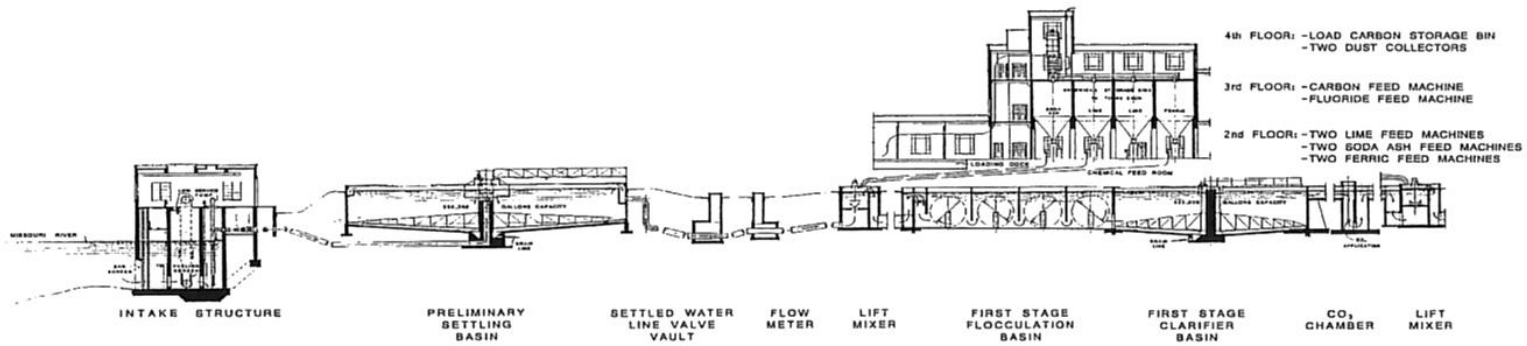
The distribution system has three pressure zones. The first zone is the flat (western and southern) sections of the city and is served by three 2 million gallon reservoirs and one 3-million gallon reservoir. Three of the reservoirs are located downtown and one is located in the southeastern part of the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

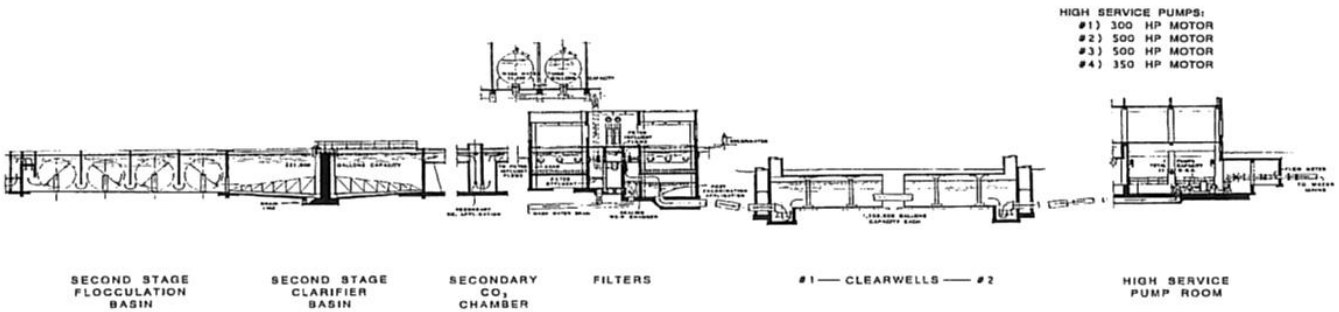
Four booster pump stations and 4 elevated storage tanks with a combined capacity of 1.2 million gallons serve the second pressure zone (bluffs). Lincoln Pump Station has three pumps rated at 600, 750 and 750 gallons per minute (GPM), one is dual drive (electric or gas). Lincoln Pump Station delivers 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





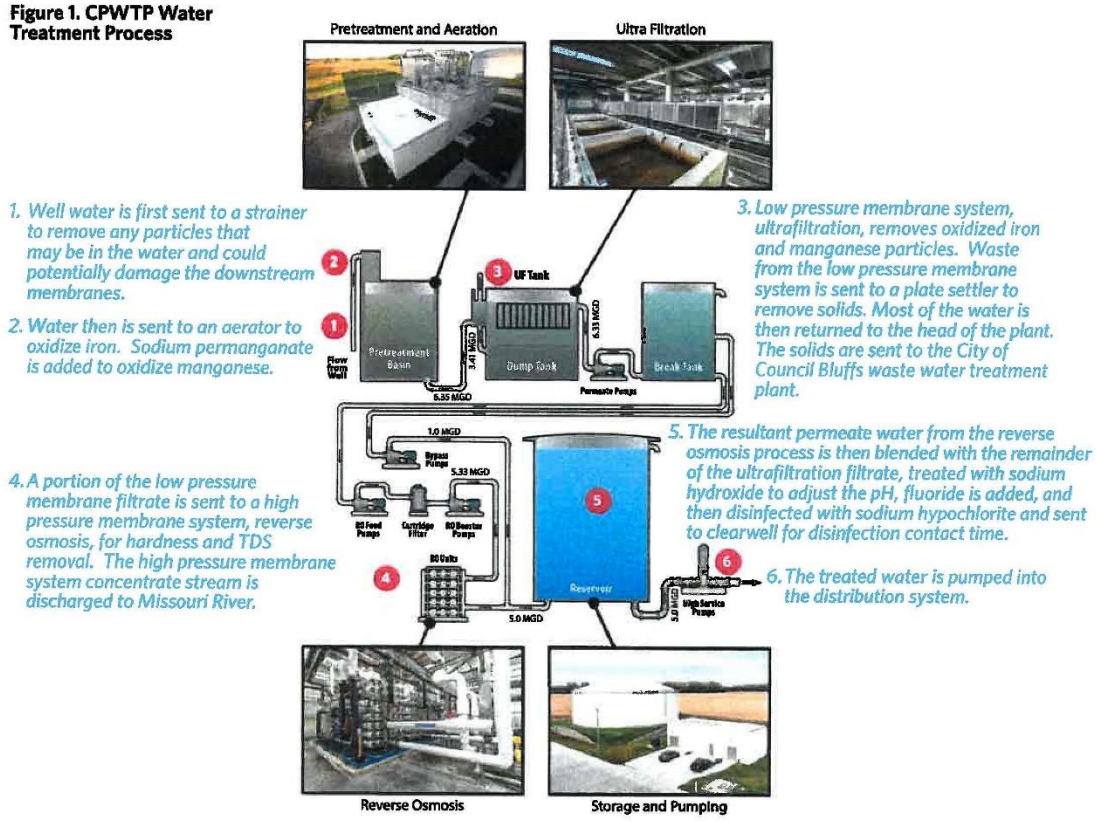
Unique Application of Different Technology, Techniques, Materials or Equipment

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 Iowa 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 Treatment Process



COUNCIL BLUFFS CITY WATER WORKS

FINANCIAL STATEMENTS

DECEMBER 31, 2018 AND 2017

(With Independent Auditors' Report Thereon)

CONTENTS

	Page
OFFICIALS	
INDEPENDENT AUDITOR'S REPORT	
MANAGEMENT'S DISCUSSION AND ANALYSIS	1-4
FINANCIAL STATEMENTS	
Statements of net position	5
Statements of revenues, expenses and changes in net position	6
Statements of cash flows	7
Notes to financial statements	8-19
REQUIRED SUPPLEMENTARY INFORMATION	
Schedule of the Water Works' proportionate share of the net pension liability	20
Schedule of Water Works' contributions	21-22
Notes to required supplementary information – pension liability	23
OTHER INFORMATION	
Budgetary comparison schedule of revenues, expenditures, and changes in balances – budget and actual	24
Notes to budgetary comparison schedule of revenues, expenditures and changes in balances – budget and actual	25
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*	26-27
SCHEDULE OF FINDINGS	28

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, 2018 and 2017, 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, 2018 and 2017 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 April 10, 2019 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.

Hamilton Associates, P.C.

Council Bluffs, Iowa
April 10, 2019

Council Bluffs Water Works
Council Bluffs, Iowa

MANAGEMENT'S DISCUSSION AND ANALYSIS

Calendar Year Ending December 31, 2018

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, 2018. We encourage readers to consider this information in conjunction with our financial statements, which follow.

FINANCIAL HIGHLIGHTS

- The Water Works' operating revenues decreased 1.2% or $151,698 from calendar year 2017 to 2018.
- The Water Works' operating expenses decreased by .1% or $11,076, in calendar year 2017 to 2018.
- The Water Works' net position increased 3.8% or $1,657,911, from December 31, 2017 to December 31, 2018.

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.

Council Bluffs Water Works
Council Bluffs, Iowa

MANAGEMENT'S DISCUSSION AND ANALYSIS
Calendar Year Ending December 31, 2018

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 92.4% 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 7.1% is the unrestricted position that can be used to meet the Water Works' obligations as they come due.

Statements of Net Position
December 31, 2018 and 2017

	2018	2017
Current assets	$ 7,828,634	$ 6,883,230
Restricted assets	2,315,350	5,866,476
Capital assets	68,469,550	67,746,835
Total assets	$ 78,613,534	$ 80,496,541
Deferred outflows of resources	$ 484,897	$ 589,635
Current liabilities (payable from current assets)	$ 3,614,778	$ 3,349,647
Current liabilities (payable from restricted assets)	2,085,169	5,845,956
Revenue bonds payable	24,721,000	26,148,000
Other liabilities	3,694,013	2,463,408
Total liabilities	$ 34,114,960	$ 37,807,011
Deferred inflows of resources	$ 158,383	$ 111,988
Net investment in capital assets	$ 41,420,844	$ 39,401,635
Restricted	230,180	20,520
Unrestricted	3,174,064	3,745,022
Total net position	$ 44,825,088	$ 43,167,177

Council Bluffs Water Works
Council Bluffs, Iowa

MANAGEMENT'S DISCUSSION AND ANALYSIS

Calendar Year Ending December 31, 2018

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 2018, operating revenues decreased by $151,698 or 1.2%, due to a decrease in consumption.

A summary of revenues and expense for the years ending December 31, 2018 and 2017 is presented below:

Statements of Revenues and Expenses
December 31, 2018 and 2017

	2018	2017
Operating revenues		
Metered water sales	$ 11,481,829	$ 11,494,502
Rental	145,076	189,952
Other	712,650	806,799
Total operating revenues	$ 12,339,555	$ 12,491,253
Operating expenses		
Facilities and grounds	$ 992,962	$ 1,025,219
Inventory adjustment	(9,859)	4,341
Purification	2,118,942	1,905,796
Distribution and meter	1,279,173	1,376,874
Customer accounting	518,284	504,192
Administration and general	2,539,018	2,566,134
Pension and social security	489,388	488,609
Depreciation	3,517,094	3,584,913
Total operating expenses	$ 11,445,002	$ 11,456,078
Nonoperating revenues (expenses)		
Interest on investments	$ 312,828	$ 230,493
Interest expense	(904,176)	(948,795)
Loss on disposal of equipment	(2,604)	(8)
Nonoperating revenues, net	$ (593,952)	$ (718,310)
Change in net position	$ 300,601	$ 316,865
Total Net Postion	44,825,088	43,167,177

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, 2018 the Water Works had $128,673,355 invested in capital assets, net of accumulated depreciation of $60,203,805. Depreciation expense totaled $3,517,094 for calendar year 2018. More detailed information about the Water Works' capital assets is presented in Note 4 to the financial statements.

LONG-TERM DEBT

At December 31, 2018, the Water Works had $26,293,000 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.

FINANCIAL STATEMENTS

COUNCIL BLUFFS CITY WATER WORKS

STATEMENTS OF NET POSITION
December 31, 2018 and 2017

ASSETS	2018	2017
CURRENT ASSETS		
Cash (Note 2)	$ 4,960,902	$ 4,141,574
Inventory	968,665	846,794
Receivables:		
Consumer accounts	1,304,609	1,366,951
Unbilled revenues	409,173	391,201
Total receivables	$ 1,713,782	$ 1,758,152
Prepaid expense	185,285	136,710
Restricted assets (Note 3)	2,315,350	5,866,476
Total current assets	$ 10,143,984	$12,749,706
PROPERTY, PLANT AND EQUIPMENT, NET (Note 4)	68,469,550	67,746,835
Total assets	$ 78,613,534	$80,496,541
DEFERRED OUTFLOWS OF RESOURCES		
Pension related deferred outflows (Note 9)	$ 484,897	$ 589,635
LIABILITIES		
CURRENT LIABILITIES (payable from current assets):		
Accounts payable	$ 221,307	$ 185,551
Accrued wages and payroll taxes	133,503	112,685
Accrued compensated absences	312,215	315,176
Accrued interest payable	68,649	72,385
Construction costs payable	396,445	574,430
Retainage payable	359,261	99,770
Due to City of Council Bluffs	551,398	466,650
Current portion of long term debt (Note 5)	1,572,000	1,523,000
Total current liabilities (payable from current assets)	$ 3,614,778	$ 3,349,647
CURRENT LIABILITIES (payable from restricted assets):		
Consumer deposits	$ 809,125	$ 795,360
Plant expansion and main extension escrow deposits	1,009,786	4,796,457
Accrued interest on consumer deposits	266,258	254,139
Total current liabilities (payable from restricted assets)	$ 2,085,169	$ 5,845,956
LONG TERM DEBT (Note 5)	$ 24,721,000	$26,148,000
OTHER LIABILITIES		
Deferred revenue (Note 6)	$ 1,326,920	$ -
Net pension liability (Note 9)	2,367,093	2,463,408
Total other liabilities	$ 3,694,013	$ 2,463,408
Total liabilities	$ 34,114,960	$37,807,011
DEFERRED INFLOWS OF RESOURCES		
Pension related deferred inflows (Note 9)	$ 158,383	$ 111,988
NET POSITION		
Net investment in capital assets	$ 41,420,844	$39,401,635
Restricted	230,180	20,520
Unrestricted	3,174,064	3,745,022
Total net position	$ 44,825,088	$43,167,177

See Notes to Financial Statements

COUNCIL BLUFFS CITY WATER WORKS

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
Years Ended December 31, 2018 and 2017

	2018	2017
OPERATING REVENUES		
Metered water sales	$ 11,481,829	$ 11,494,502
Rental	145,076	189,952
Other	712,650	806,799
Total operating revenues	$ 12,339,555	$ 12,491,253
OPERATING EXPENSES		
Facilities and grounds	$ 992,962	$ 1,025,219
Inventory adjustment	(9,859)	4,341
Purification	2,118,942	1,905,796
Distribution and meter	1,279,173	1,376,874
Customer accounting	518,284	504,192
Administration and general	2,539,018	2,566,134
Pension and social security	489,388	488,609
Depreciation	3,517,094	3,584,913
Total operating expenses	$ 11,445,002	$ 11,456,078
Operating income	$ 894,553	$ 1,035,175
NONOPERATING REVENUES (EXPENSES)		
Interest on investments	$ 312,828	$ 230,493
Interest expense	(904,176)	(948,795)
Loss on disposal of equipment	(2,604)	(8)
Nonoperating revenues, net	$ (593,952)	$ (718,310)
Change in net position	$ 300,601	$ 316,865
NET POSITION - BEGINNING	$ 43,167,177	$ 41,954,564
Contributions in aid of construction (Note 7)	1,357,310	895,748
NET POSITION - END OF YEAR	$ 44,825,088	$ 43,167,177

See Notes to Financial Statements

COUNCIL BLUFFS CITY WATER WORKS

STATEMENTS OF CASH FLOWS
Years Ended December 31, 2018 and 2017

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash received from customers and users	$ 11,526,199	$ 11,445,820
Cash received from other revenues	830,646	996,751
Cash received for easement (Note 6)	1,354,000	-
Cash paid to suppliers for goods and services	(4,587,852)	(4,520,452)
Cash paid to employees and on their behalf	(3,388,306)	(3,289,718)
(Payments) receipts for City sewer services net of collections	84,748	108,323
Net cash provided by operating activities:	$ 5,819,435	$ 4,740,724
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Principal payment of long term debt	$ (1,523,000)	$ (1,478,000)
Long term debt issued	145,000	-
Interest paid on long term debt	(868,893)	(914,809)
Interest paid on consumer deposits	(26,899)	(26,400)
Additions to property, plant, and equipment	(4,160,908)	(3,972,960)
Plant expansion and main extension escrow deposits	(3,786,671)	4,416,586
Contributions-in-aid of construction	1,357,310	895,748
Net cash provided by (used in) capital and related financing activities	$ (8,864,061)	$ (1,079,835)
CASH FLOWS FROM INVESTING ACTIVITIES		
Interest received on investments	312,828	230,493
Net cash provided by investing activities	$ 312,828	$ 230,493
NET INCREASE (DECREASE) IN CASH	$ (2,731,798)	$ 3,891,382
CASH - BEGINNING OF YEAR	10,008,050	6,116,668
CASH - END OF YEAR	$ 7,276,252	$ 10,008,050
RECONCILIATION TO BALANCE SHEETS		
Cash	$ 4,960,902	$ 4,141,574
Cash included in restricted assets	2,315,350	5,866,476
	$ 7,276,252	$ 10,008,050
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:		
Operating income (loss)	$ 894,553	$ 1,035,175
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	3,517,094	3,584,913
Changes in assets and liabilities:		
(Increase) Decrease in inventory	(121,871)	37,148
(Increase) Decrease in receivables	44,370	(48,682)
(Increase) Decrease in prepaid insurance	(48,575)	(45,080)
(Increase) Decrease in deferred outflows of resources	104,738	(50,769)
Increase (Decrease) in accounts payable	35,756	(84,628)
Increase (Decrease) in salaries payable	20,818	(964)
Increase (Decrease) in accrued compensated absences	(2,961)	48,379
Increase (Decrease) in due to City of Council Bluffs	84,748	108,323
Increase (Decrease) in deferred revenue	1,326,920	-
Increase (Decrease) in net pension liability	(96,315)	110,660
Increase (Decrease) in consumer deposits	13,765	30,880
Increase (Decrease) in deferred inflows of resources	46,395	15,369
Net cash provided by operating activities	$ 5,819,435	$ 4,740,724

See Notes to Financial Statements

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.

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.

Reclassifications:

Certain reclassifications have been made to the prior years' financial statements to conform to the current year presentation. These reclassifications had no effect on previously reported results of operations or net position.

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.

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.

Deferred Inflows of Resources:

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 April 10, 2019, which is the date the financial statements were available to be issued.

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, 2018 balance sheet including restricted cash and cash equivalents and investments:

Deposits:

At December 31, 2018, deposits consisted of demand deposits and certificates of deposits and had the following balances:

Book Balance	$ 7,274,452
Bank Balance	$ 7,720,883

Of the total deposits, $250,000 was covered by federal depository insurance and $7,470,883 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, 2018 and 2017 are as follows:

	2018	2017
Consumer deposit fund cash	$ 1,102,349	$ 1,066,776
Plant expansion deposit	1,022,077	4,709,263
Main extension deposit	190,924	90,437
	$ 2,315,350	$ 5,866,476

4. Property, Plant and Equipment

Property, plant and equipment at December 31, 2018 and 2017 consisted of the following:

Description	Useful Life in Years	2018	2017
Land	-	$ 3,500,307	$ 3,500,307
Building and Structures	20 - 50	36,297,925	36,066,830
Water Distribution System	20 - 75	64,320,638	59,331,453
Meters	25 - 40	1,912,122	1,871,591
Tools and Equipment	3 - 20	18,522,840	18,672,653
Automobiles and Trucks	5	1,585,032	1,454,396
Office Equipment	15	104,985	104,985
Work in Progress	-	2,429,506	3,864,442
		$ 128,673,355	$ 124,866,657
Less Accumulated Depreciation		(60,203,805)	(57,119,822)
		$ 68,469,550	$ 67,746,835

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. The Iowa 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, 2018, the Water Works had drawn down $145,000.

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, 2018 and 2017.

Principal and interest requirements to maturity on revenue bonds outstanding at December 31, 2018 are as follows:

Years ended December 31,	Principal	Interest	Total Requirements
2019	$ 1,572,000	$ 758,058	$ 2,330,058
2020	1,765,000	711,187	2,476,187
2021	1,672,000	663,300	2,335,300
2022	1,725,000	614,910	2,339,910
2023	1,780,000	564,960	2,344,960
2024-2028	9,770,000	2,016,840	11,786,840
2029-2033	6,425,000	606,780	7,031,780
2034-2038	1,113,000	167,340	1,280,340
2039-2040	471,000	21,300	492,300
	$ 26,293,000	$ 6,124,675	$ 32,417,675

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 balance of $1,326,920 represents remaining cash received that has not yet been recognized.

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, 2017	$ 1,348,706	$ 4,990,190	$ 6,338,896
Contributions-in-aid of construction	614,143	281,605	895,748
Transfers – Depreciation of contributed property, plant and equipment	(181,341)	(604,170)	(785,511)
Balances at December 31, 2017	$ 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

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 $455,100. 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, 2018 and 2017 was $114,833 and $111,226, respectively.

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 Iowa 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.

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.

Through June 30, 2018 pursuant to the required rate, Regular members contributed 5.95 percent of pay and the Water Works contributed 8.93 percent for a total rate of 14.88 percent. Beginning July 1, 2018, 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, 2018 and 2017 were $252,367 and $248,961, respectively.

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

At December 31, 2018 and 2017, the Water Works reported a liability of $2,367,093 and $2,463,408, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018 and June 30, 2017, 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, 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. At June 30, 2017, the Water Works' collective proportion was .0369811 percent which was a decrease of .0004037 percent from its proportion measured as of June 30, 2016.

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, 2018 and 2017, the Water Works recognized pension expense of $319,656 and $324,143, respectively. The Water Works reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources at December 31:

	2018		2017	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 12,978	$ 53,500	$ 22,616	$ 21,344
Changes of assumptions	337,680	-	428,027	-
Net difference between projected and actual earnings on pension plan investments	-	65,040	-	25,729
Changes in proportion and differences between Water Works contributions and proportionate share of contributions	8,097	39,843	14,163	64,915
Water Works' contributions subsequent to the measurement date	126,142	-	124,829	-
	$ 484,897	$ 158,383	$ 589,635	$ 111,988

$126,142 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, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions as of December 31, 2018, will be recognized in pension expense as follows:

Year Ended December 31,	
2019	$ 141,534
2020	76,561
2021	(17,917)
2022	1,169
2023	(975)
Total	$ 200,372

There were no non-employer contributing entities at IPERS.

9. Pension Plan – Continued

Actuarial Assumptions:

The total pension liability in the June 30, 2018 and June 30, 2017 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, 2018 and June 30, 2017 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 building-block 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:

Asset Class	Asset Allocation	Long-Term Expected Real Rate of
Domestic Equity	24%	6.25%
International Equity	16	6.71
Core-plus fixed income	27	2.25
Public Credit	3.5	3.46
Public real assets	7	3.27
Cash	1	(0.31)
Private equity	11	11.15
Private real assets	7.5	4.18
Private credit	3	4.25
Total	100%	

9. Pension Plan – Continued

Discount Rate:

The discount rate used to measure the total pension liability was 7 percent for 2018 and 2017. 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, 2018 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% Decrease (6.0%)	Discount Rate (7.0%)	1% Increase (8.0%)
Water Works' proportionate share of the net pension liability - 2018	$ 4,017,432	$ 2,367,093	$ 982,703

The following presents the Water Works' proportionate share of the net pension liability recorded at December 31, 2017 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% Decrease (6.0%)	Discount Rate (7.0%)	1% Increase (8.0%)
Water Works' proportionate share of the net pension liability - 2017	$ 4,058,709	$ 2,463,408	$ 1,123,050

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, 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. At December 31, 2017, the Water Works reported payables to the defined benefit pension plan of $9,363 for legally required employer contributions and $6,249 for legally required employee contributions which had been withheld from employee wages but not yet remitted to IPERS.

REQUIRED SUPPLEMENTARY INFORMATION

COUNCIL BLUFFS CITY WATER WORKS

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

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

	2018	2017	2016	2015
Water Works' proportion of the net pension liability (asset)	0.0374052%	0.0369811%	0.0373848%	0.0405283%
Water Works' proportionate share of the net pension liability	2,367,093	2,463,408	2,352,748	1,607,315
Water Works' covered-employee payroll	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	84.20%	89.24%	87.70%	61.94%
Plan fiduciary net position as a percentage of the total pension liability	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.

COUNCIL BLUFFS CITY WATER WORKS

SCHEDULE OF WATER WORKS' CONTRIBUTIONS
Iowa Public Employee's Retirement System
Last Ten Calendar Years, ending December 31
(In Thousands)

	2018	2017	2016	2015
Statutorily required contributions	$ 262	$ 249	$ 243	$ 235
Contributions in relation to the statutorily required contribution	(262)	(249)	(243)	(235)
Contribution deficiency (excess)	$ -	$ -	$ -	$ -
Water Works' covered-employee payroll	$ 2,857	$ 2,788	$ 2,720	$ 2,628
Contributions as a percentage of covered-employee payroll	9.17%	8.93%	8.93%	8.94%

See accompanying independent auditor's report

COUNCIL BLUFFS CITY WATER WORKS

SCHEDULE OF WATER WORKS' CONTRIBUTIONS
Iowa Public Employee's Retirement System
Last Ten Calendar Years, ending December 31
(In Thousands)

2014	2013	2012	2011	2010	2009
$ 234	$ 228	$ 204	$ 181	$ 155	$ 146
(234)	(228)	(204)	(181)	(155)	(146)
$ -	$ -	$ -	$ -	$ -	$ -
$ 2,620	$ 2,594	$ 2,434	$ 2,409	$ 2,264	$ 2,246
8.93%	8.79%	8.38%	7.51%	6.85%	6.50%

COUNCIL BLUFFS CITY WATER WORKS

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION – PENSION LIABILITY

Year ended December 31, 2018

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 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.

OTHER INFORMATION

COUNCIL BLUFFS CITY WATER WORKS

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

Year ended December 31, 2018

	2018 Actual	2018 Budget	Budget Variance Favorable (Unfavorable)
Operating revenues:			
Metered water sales	$11,481,829	$ 12,000,000	$ (518,171)
Rental	145,076	191,000	(45,924)
Other	712,650	620,000	92,650
Total operating revenues	$12,339,555	$ 12,811,000	$ (471,445)
Operating expenses:			
Facilities and grounds	$ 992,962	$ 1,024,000	$ 31,038
Inventory adjustment	(9,859)	5,000	14,859
Purification	2,118,942	2,114,000	(4,942)
Distribution and meter	1,279,173	1,364,000	84,827
Customer accounting	518,284	463,000	(55,284)
Administration and general	2,539,018	2,575,000	35,982
Pension and social security	434,570	465,000	30,430
Total operating expenses	$ 7,873,090	$ 8,010,000	$ 136,910
Operating income	$ 4,466,465	$ 4,801,000	$ (334,535)
Nonoperating revenues (expenses):			
Interest on investments	$ 312,828	$ 223,000	$ 89,828
Interest expense	(904,176)	(960,000)	55,824
Loss on disposal of equipment	(2,604)	(5,000)	2,396
Nonoperating revenues, net	$ (593,952)	$ (742,000)	$ 148,048
Surplus (Deficit) from Operations	$ 3,872,513	$ 4,059,000	$ (186,487)
Debt Service	(1,523,000)	(1,633,000)	110,000
Capital Outlay	(2,803,598)	(4,390,000)	1,586,402
Bond Proceeds	145,000	-	145,000
Surplus (Deficit)	$ (309,085)	$ (1,964,000)	$ 1,654,915

Reconcilation to statement of revenues and expenses:

Budget Basis Deficit	$ (309,085)
Debt Service	1,523,000
Capital Outlay	2,803,598
Bond Proceeds	(145,000)
Pension Expense	(54,818)
Depreciation and Amortization	(3,517,094)
Excess of revenues over expenses	$ 300,601

COUNCIL BLUFFS CITY WATER WORKS

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

Year ended December 31, 2018

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 2018, 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, 2018 and have issued our report thereon dated April 10, 2019. 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*.

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.

Hamilton Associates, P.C.

Council Bluffs, Iowa
April 10, 2019

COUNCIL BLUFFS CITY WATER WORKS

SCHEDULE OF FINDINGS
Year ended December 31, 2018

I. FINDINGS RELATED TO THE FINANCIAL STATEMENTS

None reported

II. OTHER FINDINGS RELATED TO STATUTORY REPORTING

II-A-18 Certified Budget – We compared the Water Works disbursements for the twelve months ended December 31, 2018 with the published budget and found that disbursements did not exceed the amounts budgeted.

II-B-18 Questionable Disbursements – 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 Travel Expense – No expenditures of funds for travel expenses of spouses of Water Works' officials or employees were noted.

II-D-18 Business Transactions – During the course of our audit of Water Works as of December 31, 2018, 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 Board Minutes – We noted no transactions that we believe should have been approved in the Board minutes but were not.

II-G-18 Deposits and Investments – No instances of non-compliance with the deposit and investment provisions of Chapters 12B and 12C of the Code of Iowa and the City's investment policy were noted.

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