

# **THE 2020 WATER AND WASTEWATER ANNUAL REPORT**

The City of Craig Water and Wastewater Departments are proud to present this annual report for 2020. During the past year, both of the publicly owned and operated utilities successfully met the needs of the community, and continuously maintained compliance with the mandatory guidelines established by both the state and federal regulations governing the industry.

## **PRE-AUDIT PROJECTED FIGURES FOR 2020:**

	<b><u>Revenues:</u></b>	<b><u>Expenditures:</u></b>	<b><u>Unreserved Fund Balance:</u></b>
<b>WATER FUND</b>	<b>\$6,938,560.00</b>	<b>\$4,712,819.00</b>	<b>\$4,515,319.00</b>
<b>WASTEWATER FUND</b>	<b>\$2,442,712.00</b>	<b>\$2,757,010.00*</b>	<b>\$1,406,499.00</b>

**\*Note: Projected expenditures in excess of revenue in the wastewater fund can be attributed to the sludge line replacement project, along with engineering and any other miscellaneous costs associated with this infrastructure replacement.**

# **2020 WATER DEPARTMENT ANNUAL REPORT**

## **OUR MISSION STATEMENT:**

IT IS THE MISSION OF THE CITY OF CRAIG WATER DEPARTMENT TO PROVIDE THE CUSTOMER WITH SAFE, DEPENDABLE, AND HIGH QUALITY DRINKING WATER AT A REASONABLE COST; TO MAINTAIN EXISTING INFRASTRUCTURE AND EFFECTIVELY PLAN FOR MEETING THE NEEDS OF A GROWING COMMUNITY; AND TO SATISFY THE CONCERNS OF THE PUBLIC IN A TIMELY, COURTEOUS AND PROFESSIONAL MANNER.





Figure 1 Water Plant Aerial Picture

## **WATER PRODUCTION OVERVIEW;**

	<u>(2020)</u>	<u>(2019)</u>	<u>( 2018)</u>	<u>(2017)</u>
Total Production MG	594.0	543.5	620.0	587.6
Peak Month MG	99.2/Aug	96.0/July	114.4/July	106.2/July
Chemical Cost/Year	\$123,029.73	\$109,791.04	\$123,770.15	\$121,343.59
Chemical Cost/MG	\$207.13/mg	\$202.02/mg	\$199.64/mg	\$206.53/mg
Total Backwash %	2.67%	2.76%	2.84%	2.57%

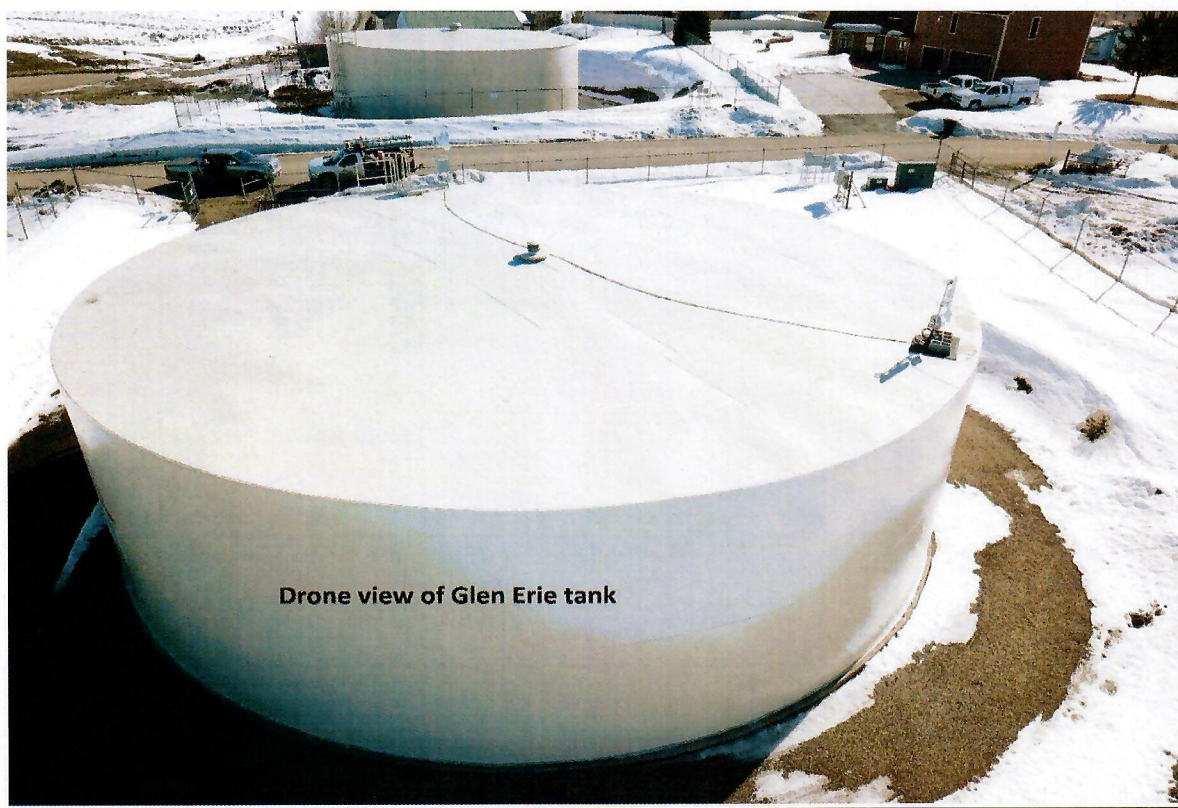
## **Backwash Pond #3 Cleaning;**

<u>Contractor Cost</u>	<u>Loads to Landfill</u>	<u>Tons of Material</u>	<u>City Man Hours</u>
\$ 9, 981.25	59	792.18	74



### **Contractual Engineering/Capital Projects:** (\*unfinished)

<u>Projects</u>	<u>Date Start/Complete</u>	<u>Costs Project/Engineering</u>
Automation Equipment	7-14-2020/10-15-2020	\$120,125.00/N/A in-house
Replace MCC Panel-O	11-11-2020/2-26-2021	\$ 49,880.00/ \$ 1,920.00
Small Barclay Tank	8-1-2020/10-13-2020	\$153,350.00/ \$ 9,900.00
Plant/System Upgrade*	7-25-2018/11-11-2020	\$2,570,000.00/\$701,680.00



### **Elkhead Operational & Maintenance:**

<u>Parts/Service Costs</u>	<u>Admin. Fee</u>	<u>Site Trips</u>	<u>Man Hours</u>	<u>Total City Costs</u>
\$40,492.87	\$5,711.35	137	292	\$62,824.86



## **Water Main Replacement Projects (In House):**

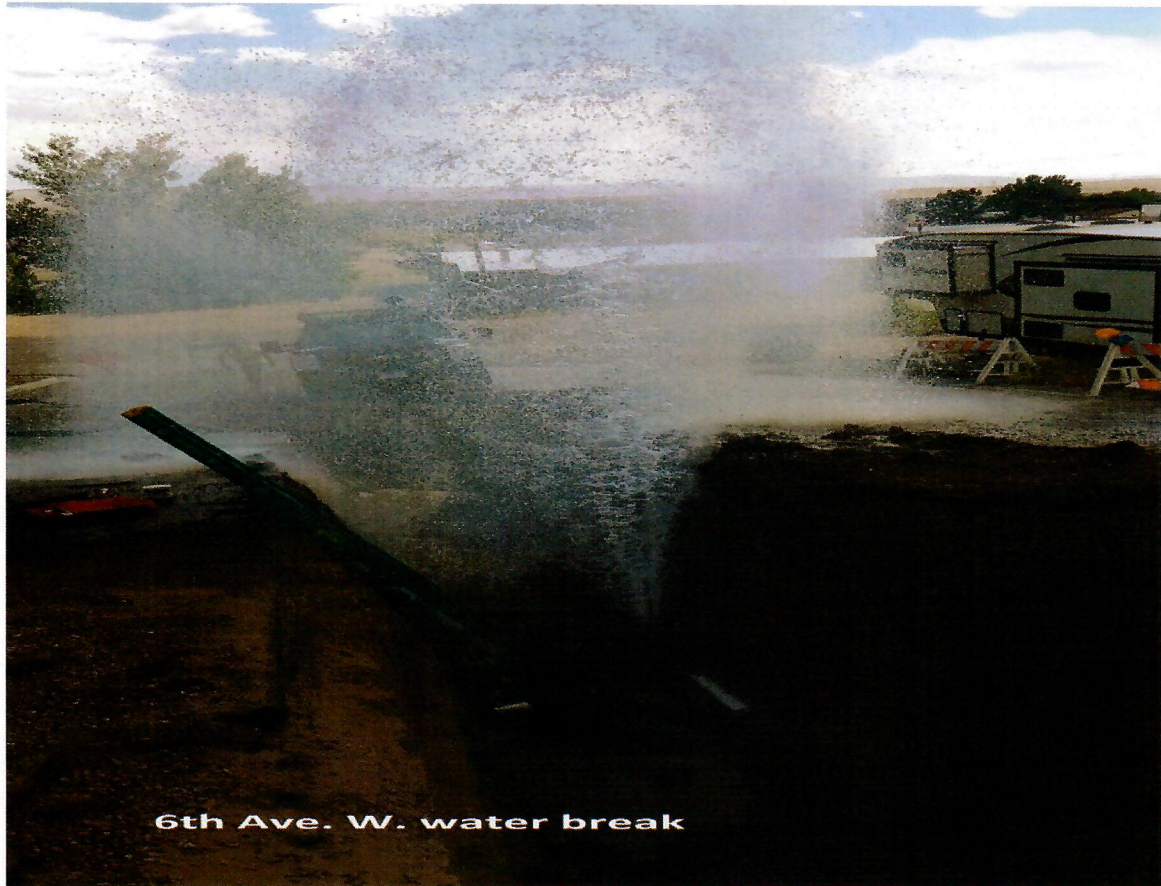
<u>Location</u>	<u>Length/Size</u>	<u>Manhours</u>	<u>Approximate Materials Cost</u>
6 <sup>th</sup> Avenue West	400Ft/6" PVC	350	\$ 15,000.00



## **Bulk Water Sales Stations Usage:**

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
#1 Station	4.04mg	3.54mg	3.94mg	3.84mg
#2 Station	4.35mg	3.48mg	4.09mg	4.08mg
#3 Station	2.42mg	2.38mg	3.13mg	1.87mg
Fire Hydrant Meters	0.20mg	0.33mg	0.23mg	0.18mg
Total Water Delivered	11.01mg	9.73mg	11.39mg	9.96mg







## **Distribution System Maintenance & Projects:**

<u>Project Name</u>	<u>Quantity</u>	<u>Man-hours</u>
Water Breaks	25	250
Line Locates	1688	1500
Valves Exercised	475	270
Valves Replaced	0	0
Fire Hydrants Exercised	260	190
Fire Hydrants Replaced	0	0
Fire Hydrants Flushed	260	240
Water Service Taps	5	8
Curb Stop/Risers Replaced	5	55
Final Meter Reads	264	100
Water Meters/MXUs Repairs	88	85
Services Shut Offs/Turn Ons	302	230
(New services)	6	
(Seasonal)	41	
(Repairs)	127	
(Nonpayment)	96	
(Miscellaneous)	32	
Water Pump Station Maintenance	45	125
Delinquent Account Notices Distributed	900	110
Water Meter Reads	3,500/month	160
Bulk Water Sales Stations Maintenance	25	30
Storage Tank Inspections/Maintenance	25	50
Cross Connection Control Program	2 (staff/50 surveys)	15
Training CIRSA & State Certification	4 (distribution staff)	50

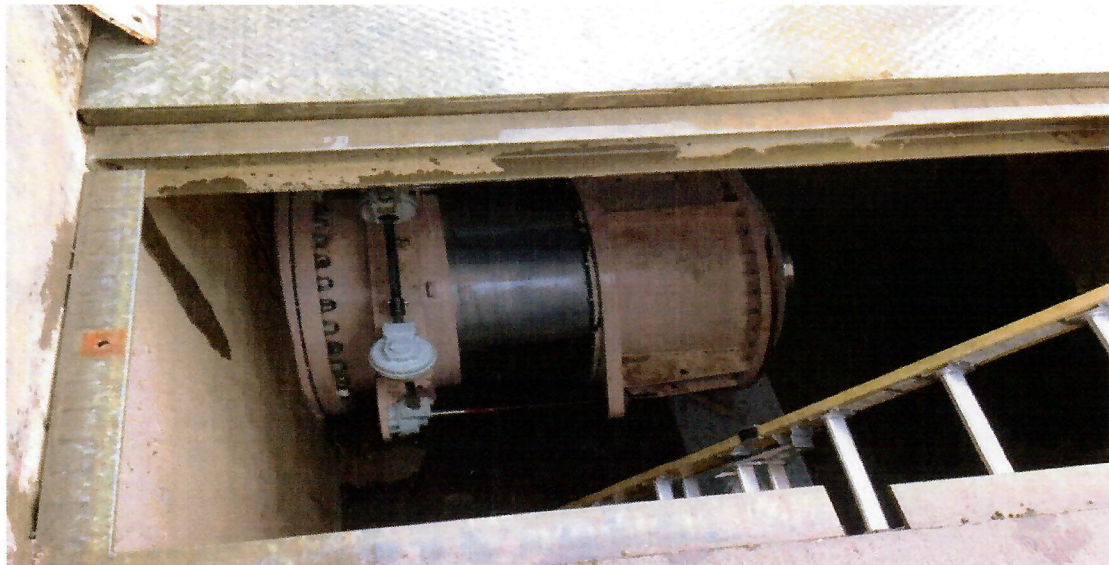


Figure 7: Fixed Cone Valve Repair and Alignment Project

## **WATER PLANT GOALS 2021;**

1. Coordinate removal of sediment from the #1 backwash pond.
2. Oversee the North Glen Erie Tank “Repair & Improvement Project”.
3. Continue to work on (in-house) water main replacement program.
4. Oversee warranty repairs of the Water Plant & System “Upgrade & Improvement Project”, and finalize remaining equipment changes.
5. Continue working with SGM on water and wastewater capital projects design, construction, and development.





## 2020 WASTEWATER ANNUAL REPORT



### Treatment

	Percent Change Per Year						
	2020	2019	2018	2017	19-20	18-19	17-18
Effluent flow (million gallons	292	284	282	292	+2.74	+0.70	-3.42
Effluent flow (Avg. Daily MGD)	0.813	0.777	0.771	0.800	+4.43	+0.077	-3.62
Biosolids Produced (dry metric tons)	237	221	225	244	+6.75	-1.81	-7.79
Biosolids Land Applied (dry metric tons)	116	0*	95	95	+100.0	-25.3	+25.3
Bushels Harvested	51	32	50	45	+37.2	-36.0	+10.0
Hauled Waste received (gallons)	48,865	39,685	77,723	150,545	+18.8	-51.1	-48.4

**Safety:** Held monthly safety meetings for wastewater employees. Zero lost time accidents in 2020.

**Permit:** Zero violations in 2020.

\*109 Dry Metric Tons of Biosolids taken to landfill in 2020 for disposal due to the soil not needing further conditioning.



## Collection System

	Percent Change Per Year						
	2020	2019	2018	2017	19-20	18-19	17-18
Sewer Tap Permits	4	4	4	5	0	0	-20.0
Line Locates	1,688	873	476	136	+93.4	+83.4	+250.0
Man Hours Used	1,134.5	436.5	281.5	104	+160.0	+55.1	+170.7
City Pipe Cleaned (miles)	35.2	38.1	24.0	9.93	-7.7	+58.8	+141.3
Man Hours Used	767.25	862	613.5	300	-11.0	+40.5	+104.5
Herbicide Applied (miles)	7.07	0	0	2.69	>100.0	0	>-100.0
Man Hours Used	109	0	0	58.5	>100.0	0	>-100.0
Backup Complaints	21	24	21	18	-12.5	+14.3	+16.7
Man Hours Used	36.5	47	55.5	27.5	-22.3	-15.3	+101.8
Homeowner's Responsibility	19	16	14	17	+18.8	+14.3	-17.6
City's Responsibility	2*	8	7	1	-75.0	+14.3	+600.0
Maybell Pipe Cleaned (ft.)	389						
(miles)	0.07						
Maybell Collection System Video Inspection % Completion	100						
Man Hours Used	16						

\*Did not require action beyond our department.

Other: