

THE 2017 WATER AND WASTEWATER ANNUAL REPORT

The City of Craig Water and Wastewater Departments are proud to present this annual report for 2017. 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 set by both the state and federal regulations governing the industry.

PRE AUDIT PROJECTED FIGURES FOR 2017:

	<u>Revenues:</u>	<u>Expenditures:</u>	<u>Unreserved Fund Balance:</u>
WATER FUND	\$3,131,000.00	\$3,479,178.00	\$2,527,301.00
WASTEWATER FUND	\$1,809,000.00	\$1,611,070.00	\$1,172,589.00

2017 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.

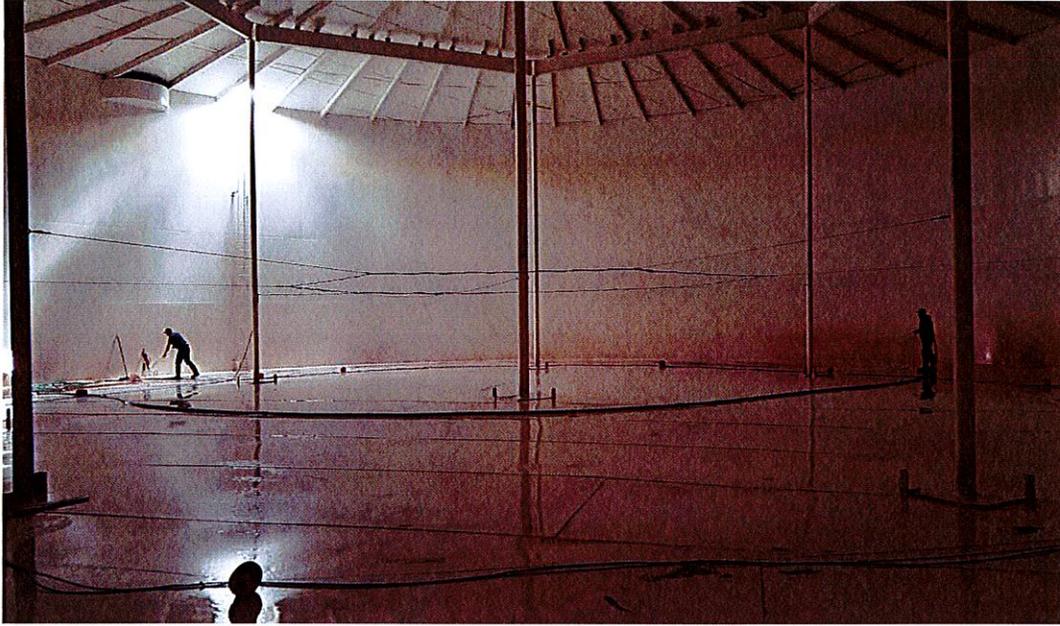


Figure 1 Pineridge Tank

WATER PRODUCTION OVERVIEW;

	<u>(2017)</u>	<u>(2016)</u>	<u>(2015)</u>	<u>(2014)</u>
Total Production MG	587.6	608.9	598.6	565.7
Peak Month MG	106.2/July	107.3/July	95.5/July	103.2/July
Chemical Cost/Year	\$121,343.59	\$121,742.33	\$130,287.24	\$104,977.78
Chemical Cost/MG	\$206.53/mg	\$199.93/mg	\$217.65/mg	\$185.57/mg
Total Backwash %	2.57%	2.89%	2.86%	1.98%

Backwash Ponds #2 & #3 Cleaning;

<u>Contractor Cost</u>	<u>Loads to Landfill</u>	<u>Tons of Material</u>	<u>City Man Hours</u>
\$14,127.50	39	665.25	80

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>
\$22,030.79	\$3,944.99	165	326	\$43,394.91

Pineridge Tank Structural Repair Project:

<u>Contractor</u>	<u>Project Schedule</u>	<u>Engineer</u>	<u>Change Orders/Cost</u>	<u>Total Cost</u>
MMI Tank	5/1/17 to 6/15/17	SGM	3/\$12,251.00	\$144,251.00

Water Plant Transformer Replacement Project:

<u>Contractor</u>	<u>Subcontractor</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Cost Estimate</u>
YVEA	Royal T Electric	March 2016	July 2017	\$210,260.00

Credits & Refunds to City

YVEA purchased old 1500KVA Transformer for	-\$ 3,000.00
Solomon Corp. purchased (2) old 300KVA transformers for	-\$ 1,500.00
YVEA Investment Credit/Contribution in Aid for	<u>-\$ 70,193.90</u>
Final Project Cost = \$138,566.10	

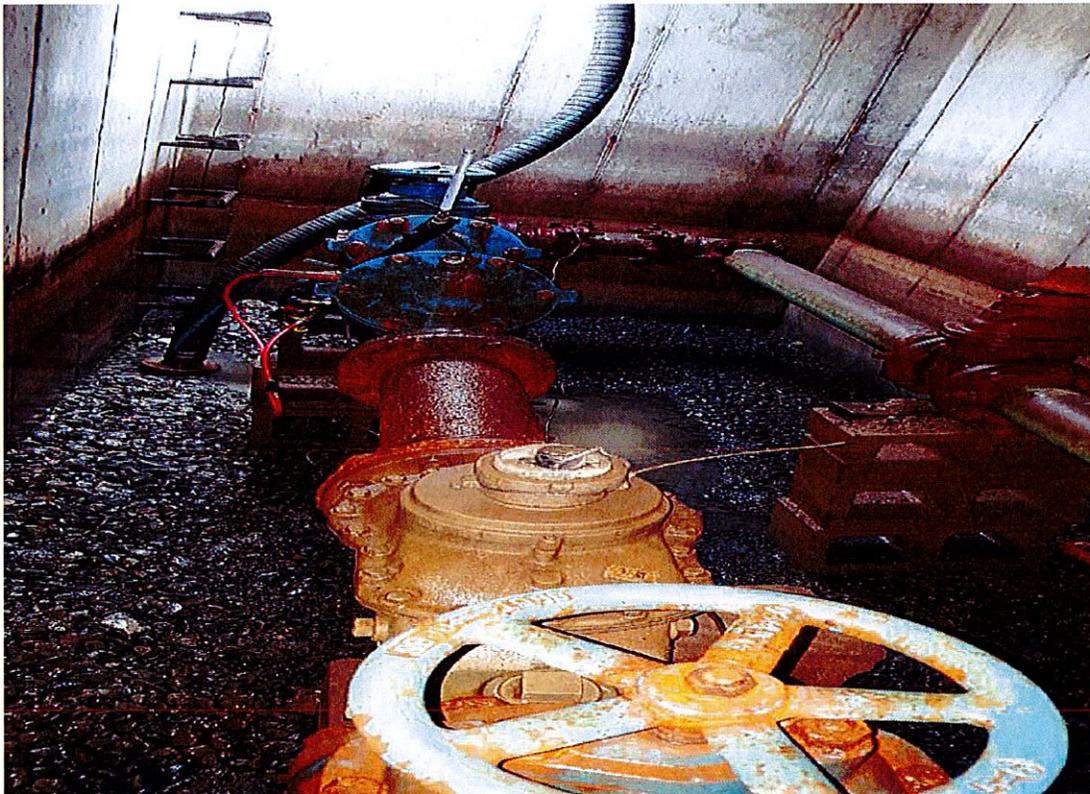


Figure 2 WWTP Meter/Backflow Device Vault

Bulk Water Sales Stations Usage:

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
#1 Station	3.84mg	4.40mg	3.40mg	2.97mg
#2 Station	4.08mg	2.59mg	3.85mg	3.60mg
#3 Station	1.87mg	3.87mg	2.77mg	3.42mg
Fire Hydrant Meters	0.18mg	0.89mg	0.90mg	1.15mg
Total Water Delivered	9.96mg	10.86mg	10.02mg	11.14mg

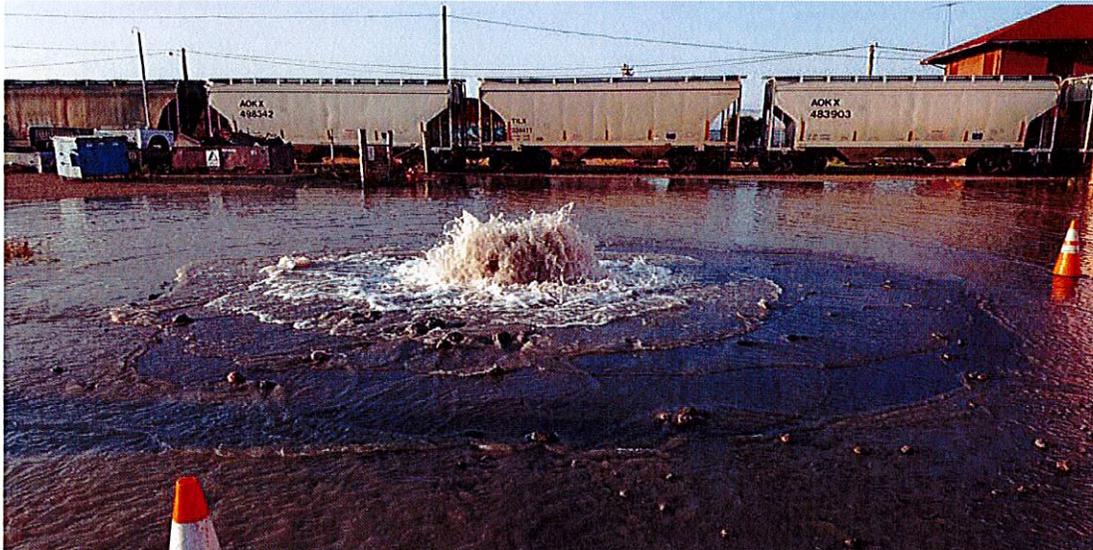


Figure 3 S Yampa Avenue Water Main Break



Figure 4 Service Line Leak at Water Main

Distribution System Maintenance & Projects:

<u>Project Name</u>	<u>Quantity</u>	<u>Man hours</u>
Water Breaks	12	114
Line Locates	109	72
Valves Exercised	110	80
Valves Replaced	4	20
Fire Hydrants Exercised	72	50
Fire Hydrants Replaced	2	12
Fire Hydrants Flushed	280	260
Water Service Taps	2	5
Curb Stop/Risers Replaced	5	20
Final Meter Reads	246	120
Water Meters/MXUs Repairs	97	90
Services Shut Offs/Turn Ons	293	160
Water Pump Station Maintenance	80	140
Steele Ct 8" Water Main Replacement	210' w/6 services/& 1 FH	840
Bulk Water Sales Stations Maintenance	40	70
Storage Tank Inspections/Maintenance	50	80
Cross Connection Control Program	58	96



Figure 5 Steele Court Old Water Main

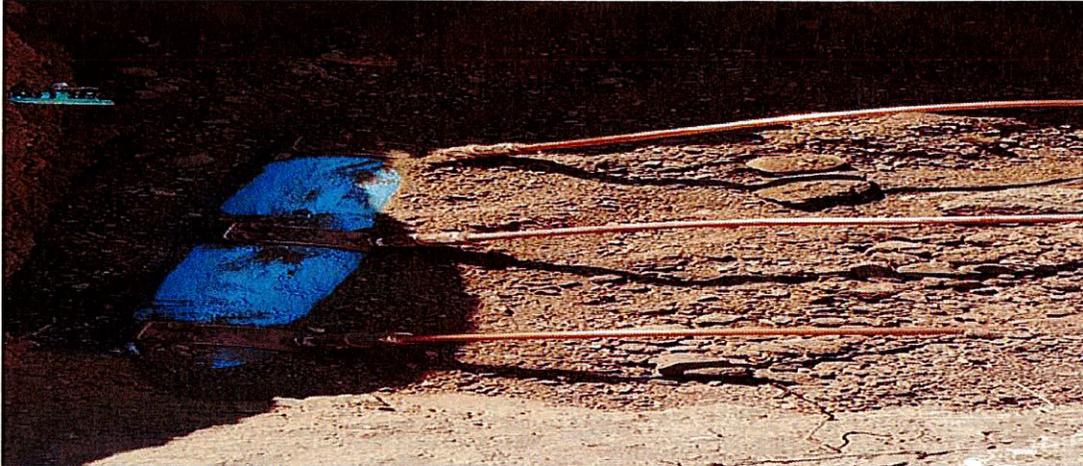


Figure 6 Steel Court New Main Service Lines

WATER PLANT GOALS 2018;

1. Coordinate removal of sediment from the #1 backwash pond.
2. Oversee the Pine Ridge Tank warranty repair work.
3. Continue to work on small (in-house) water main replacement projects.
4. Complete the full scale alternative coagulant pilot study.
5. Oversee the repairs & improvements on the Roundbottom Tank.
6. Oversee & coordinate the 2018 sewer main replacement project.
7. Work with SGM to determine what will be required to comply with the Colorado Health Department's minimum 0.2 chlorine residual (TCR) requirement by the city's April 2020 extension deadline.
8. Oversee the 13th St & Country Lane water main replacement project.



Figure 7 Steel Court New Fire Hydrant

2017 WASTEWATER ANNUAL REPORT

Treatment

	Percent Change Per Year						
	2017	2016	2015	2014	16-17	15-16	14-15
Effluent flow (million gallons)	292	310	307	304	-0.94	+0.98	+0.98
Effluent flow (Avg. Daily MGD)	0.800	0.848	0.840	0.832	-0.94	+0.98	+0.99
Biosolids Produced (dry metric tons)	244	257	236	264	-5.33	+8.90	-10.6
Biosolids Land Applied (dry metric tons)	95	95	47	59	0	+50.5	-20.3
Bushels Harvested	50	50	85	52	0	-41.2	+38.8
Hauled Waste received (gallons)	150,545	790,960	333,880	579,050	-81.0	+136.9	-42.3

Safety: Held quarterly safety meetings for wastewater employees. Zero lost time accidents in 2017.

Permit: Zero violations in 2017.

Education: One operator received his "C" Level Operator Certification.

Collection System

	Percent Change Per Year						
	2017	2016	2015	2014	16-17	15-16	14-15
Sewer Tap Permits	5	2	4	1	+60.0	-50.0	+75.0
Line Locates	136	118	139	123	+13.2	-15.1	+11.5
Man Hours Used	104	82.5	116	104.5	+20.7	-28.9	+9.9
Pipe Cleaned (ft.)	52,448	37,044	116,511	129,370	+29.4	-68.2	-9.9
Man Hours Used	300	238	610	649	+20.6	-61.0	-6.0
Herbicide Applied (ft.)	14,185	12,033	0	11,890	+15.2	+120.3	-118.9
Man Hours Used	58.5	47.5	0	71	+18.8	+47.5	-71.0
Backup Complaints	18	25	19	22	-28.0	+24.0	-13.6
Man Hours Used	27.5	52.5	74.5	30	-47.6	-29.5	+59.7
Homeowner's Responsibility	17	19	15	20	-10.5	+21.0	-25.0
City's Responsibility	1^	6*	4**	2^	-83.3	+33.3	+50.0

^Did not require action beyond our department.

*Of the six (6), only one (1) was handled beyond our department for insurance purposes.

**Of the four (4), two (2) were handled beyond our department (one for insurance, one to the State of Colorado as a Sanitary Sewer Overflow).