

**Water Department
November, 2018
Monthly Report**

Operational

1. The plant operated throughout the month and complied with all state and federal requirements for water quality and reporting.
2. All distribution system flows and pressure needs, for both fire protection and the water customers, were met.

Maintenance and Improvements

1. The staff performed all required preventative maintenance during the month.
2. Elkhead work by the staff this month consisted of routine maintenance and inspections. The staff completed the winterization of the Elkhead dam facilities near the end of the month. This included heater system start up, drained the tower and conduit, turned off the cathodic protection system, and performed annual maintenance on the fixed cone valve.
3. The staff attended various training and regulatory update seminars during the month.
4. The staff continued to work with SGM on various water and wastewater projects throughout the month. These included the design work for the minimum chlorine residual compliance project, the wastewater collection system master plan update program, and the design for the wastewater sludge line replacement project. The staff also dug two test holes for SGM's contractor Geotech to inspect and test the soils at the proposed locations for the booster chloramine station at the Roundbottom Tank, and for where one of the proposed distribution system dump valves and vault is to be installed near Murdock's. These dump valves will help reduce the distribution system's water age problem by moving water from low to high demand zones of the distribution system, and will be controlled by the water plant's SCADA system.
5. The staff continued to assist or work with other city departments, vendors, customers, and contractors as needed. The staff also worked on building and grounds maintenance, equipment repair, and the cross connection control program.

Distribution System Operation/Maintenance

1. There were 51 line locates requested and completed this month. This required approximately 38.0 man-hours to complete.
2. All work orders, meter readings, meter tech appointments, distribution of nonpayment door hangers, nonpayment water service shut offs, and service line inspections requested or scheduled were completed.
3. Miscellaneous water department work by the staff this month included; completed 19 final meter reads, completed 30 service turn offs/ons, and repaired 5 meters/MXU's.
4. The staff replaced 2 curb stops, and winterized all water system pump stations and tank level transmitter pits to get them ready for this winter.

5. The staff continued the valve exercising program this month with 8 valves being exercised.
6. The fire hydrant repair, maintenance, and replacement program was worked on by the staff. There were 3 fire hydrants repaired in November.
7. The staff repaired 2 water main breaks during the month. These repairs required approximately 12 hours to complete.
8. The staff was able to perform their regularly scheduled work on the distribution system, bulk water sales stations, and equipment maintenance during the month. They were able to assist contractors, other city departments, and complete all emergency assignments as required.

Water Production Statistics

Effluent Total Flow	23,699,000 gallons	Total Chemical Cost	\$ 3,023.92
Backwash Total Flow	767,700 gallons	Total Chemical Cost/MG	\$ 125.59
Total Flow	24,466,700 gallons	Alum & Ash Cost/Mg	\$ 74.93

(Backwash Flow % of Total = (3.24%))

The Craig Municipal Water Treatment Plant utilizes water rights for municipal use. These included direct flow diversions from the following:

Craig Irrigation Ditch
Fortification Creek Ditch

Deep Cut Ditch
Craig Water Supply System

**Water Department
December, 2018
Monthly Report**

Operational

1. The plant operated throughout the month and complied with all state and federal requirements for water quality and reporting.
2. All distribution system flows and pressure needs, for both fire protection and the water customers, were met.

Maintenance and Improvements

1. The staff performed all required preventative maintenance during the month.
2. Elkhead work by the staff this month consisted of routine maintenance and inspections.
3. The staff continued to attend training seminars this month to keep them informed on the latest technologies and regulations for the water and wastewater field.
4. The staff continued to work with SGM on various water and wastewater projects throughout the month. These included the design work for the minimum chlorine residual compliance project, updating the water distribution and wastewater collection systems master plans, and the design for the wastewater sludge line replacement project.
5. The staff took the Roundbottom Tank out of service and drained it this month to prepare this water storage tank for a "Repair & Improvement Project", which is scheduled to be done in 2019.
6. The annual CIRSA facilities inspections were performed this month, and all deficiencies noted for the water and wastewater departments were corrected by the end of the month.
7. The staff continued to assist or work with other city departments, vendors, customers, and contractors as needed. The staff also worked on building and grounds maintenance, equipment repair, and the cross connection control program.

Distribution System Operation/Maintenance

1. There were 19 line locates requested and completed this month. This required approximately 14.0 man-hours to complete.
2. All work orders, meter readings, meter tech appointments, distribution of nonpayment door hangers, nonpayment water service shut offs, and service line inspections requested or scheduled were completed.
3. Miscellaneous water department work by the staff this month included; completed 13 final meter reads, completed 23 service turn offs/ons, and repaired 8 meters/MXU's.
4. The staff replaced 1 curb stop, and performed quarterly inspections on all water storage tanks.
5. The staff continued the valve exercising program this month with 8 valves being exercised.

6. The fire hydrant repair, maintenance, and replacement program was worked on by the staff. One fire hydrant will require repairs after a vehicle collided with it, and another fire hydrant has a leak which the staff hydro excavated and attempted to make repairs, however they found out that the hydrant itself was not leaking, but that the leak is actually coming from the water line in the street that is feeding this fire hydrant. Due to the extreme cold weather that moved in this month, and some problems with excavating these areas at this time, these 2 fire hydrants will remain out of service until the weather is better to allow staff to make these repairs safely.
7. The staff repaired 2 water main breaks during the month. These repairs required approximately 14 hours to complete.
8. The staff was able to perform their regularly scheduled work on the distribution system, bulk water sales stations, and equipment maintenance during the month. They were able to assist contractors, other city departments, and complete all emergency assignments as required.

Water Production Statistics

Effluent Total Flow	25,022,000 gallons	Total Chemical Cost	\$ 3,054.94
Backwash Total Flow	852,600 gallons	Total Chemical Cost/MG	\$ 118.07
Total Flow	25,874,600 gallons	Alum & Ash Cost/Mg	\$ 74.46

(Backwash Flow % of Total = (3.41%))

The Craig Municipal Water Treatment Plant utilizes water rights for municipal use. These included direct flow diversions from the following:

Craig Irrigation Ditch	Deep Cut Ditch
Fortification Creek Ditch	Craig Water Supply System

Monthly Report

Wastewater

November 2018

A. Treatment – Operation:

1. Operated treatment plant to comply with State and Federal regulations.
2. Performed daily, weekly, and monthly maintenance as recommended in the manufacturer's manuals.
3. Treated average of 807,000 gallons/day of wastewater.
4. Received and treated 2,100 gallons of hauled waste.

B. Collection – Operation:

1. 18 man hours used to perform 36 line locates.
2. 24 man hours used to hydraulically clean 3,575 feet of sewer main as part of routine (every 5 weeks) maintenance.
3. 36.5 man hours used to hydraulically clean 6,850 feet of sewer main as part of an annual cleaning program.

C. Collection – Correction

1. 2 man hours used to respond to a backup complaint at 1111 Barclay. Homeowner stated that a local plumber told her that her backup was a result of a backup in the City's main. The main was inspected and found to be flowing well. The main was hydraulically cleaned for good measure and no obstructions were encountered. Video inspection of the main and homeowner's tap showed a mass of roots at the tap and up the service line. Determined to be homeowner's issue.
2. 1.5 man hours used to respond to a backup complaint at 695 Taylor. Inspection of the sewer main found it to be flowing well. The main was hydraulically cleaned for good measure and no obstructions were encountered. Determined to be homeowner's issue.
3. 1.5 man hours used to respond to a backup complaint at 695 Barclay. Inspection of the sewer main found it to be flowing well. The main was hydraulically cleaned for good measure and no obstructions were encountered. Determined to be homeowner's issue.
4. Replaced a small piece of Orangeberg pipe with PVC at 10th and Barclay.

D. Other:

1. Assisted other departments, local plumbers, and contractors as needed.
2. Analyzed Maybell's Wastewater Plant monthly samples.

Monthly Report
Wastewater
December 2018

A. Treatment – Operation:

1. Operated treatment plant to comply with State and Federal regulations.
2. Performed daily, weekly, and monthly maintenance as recommended in the manufacturer's manuals.
3. Treated average of 871,000 gallons/day of wastewater.
4. Received and treated 3,140 gallons of hauled waste.

B. Collection – Operation:

1. 5 man hours used to perform 11 line locates.
2. 24 man hours used to hydraulically clean 3,575 feet of sewer main as part of routine (every 5 weeks) maintenance.

C. Collection – Correction

1. 1.5 man hours used to respond to a backup complaint at 895 Russell St. Local plumber was replacing homeowner's tap and called us to say that the manhole at this address was $\frac{3}{4}$ full. Operators arrived and after inspection of the main, they found it to be flowing well, and the manhole was not $\frac{3}{4}$ full. Plumber had hit the City sewer main with his track hoe while replacing the tap, and the sewage had backed into his hole. Plumber repaired the City main and replaced the tap.

D. Other:

1. Assisted other departments, local plumbers, and contractors as needed.
2. Analyzed Maybell's Wastewater Plant monthly samples.