

**Water Department
November, 2015
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 work with SGM Engineers on various projects which included water model testing and verifications, updating the water and wastewater master plans, and updating the public works manual.
4. MMI Tank continued to work on the Pineridge Tank painting project throughout the month. They completed welding patches on the holes of the floor on this tank, and finished up painting this month. MMI and their subcontractor (CorrPro) are due back in early December to replace the cathodic protection system, wash down the inside walls of the tank with a chlorine solution to prepare it for staff to refill the tank, and hopefully we can put this tank back in service before Christmas.
5. CIRSA came in this month to do the annual facilities inspections to look for any safety problems. The water department did not have any deficiencies.
6. Royal T Electric came in near the end of the month to start the installation of the replacement transfer switch for the water plant's emergency generator. The old transfer switch no longer worked and there were no parts available for this 30+ year old piece of equipment. Final installation and testing will be completed in late December, after the Rocky Mountain Cummins serviceman replaces a leaking valve cover gasket on the emergency generator, he will then do the generator start up and testing of the new transfer switch.
7. Finally, throughout the month the staff assisted or worked with other city departments, vendors, customers, and contractors as needed. The staff continued to work on building & grounds maintenance, equipment repair, and the cross connection control program.

Distribution System Operation/Maintenance

1. All service lines and water mains were located and marked as required. There were 2 line locates required and completed this month.
2. All work orders, and service line inspections requested or scheduled were completed.
3. The staff flushed 3 fire hydrants this month.

4. The valve exercising program was worked on by the staff with 17 valves being exercised this month.
5. Pump station work by the staff this month included painting the interiors of all the pump stations.
6. Miscellaneous system and facilities issues were worked on by the staff this month. They included doing quarterly storage tank inspections, rebuilding the loading arm on the 2" bulk water sales station at 1st Street, and finishing the security camera repairs/improvements at the north bulk water sales/recycling station.
7. The staff replaced 1 curb stop riser this month.
8. The staff repaired 2 water main breaks that occurred during the month.
9. Finally, the staff continued to assist other city departments and contractors as needed. The staff cleaned the shop, office area, vehicles, performed minor repair work on various shop equipment, worked on updating the CCC program files, and updated/reset all bulk water sales stations.

Note: The staff was able to perform their regularly scheduled maintenance this month. They were able to assist contractors, and complete all emergency assignments as required.

Water Production Statistics

11-01-15 to 11-30-15

Effluent Total Flow = 26,999,000 gallons	Total Chemical Cost = \$ 3,392.42
Backwash Total Flow = 927,300 gallons	Total Chemical Cost/Mg = \$ 121.48
Total Flow = 27,926,300 gallons	Alum & Ash Cost/Mg = \$ 91.27

(Backwash Flow % of Total = 3.43%)

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

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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 finished winterization efforts at the tower, drained the 72" conduit, and started the tower bubbler system to help prevent ice from building up around the outside of the tower. Problems with the tower heating system occurred this month and the staff is presently still trying to resolve all issues with this system.
3. MMI Tank continued to work on the Pineridge Tank painting project throughout the month. Their subcontractor CorrPro arrived early in the month to reinstall the cathodic protection system. MMI then came in to clean the sandblast film off of the interior walls but they were unsuccessful as far as the city and SGM were concerned. They will come back in January 2016 with more equipment to correct this issue as well as to repair some areas on the floor where the paint was chipped off from the first attempt at cleaning the tank.
4. The Water and Wastewater chemical bid specifications for 2016 were completed and mailed out, with bids due to be received in mid January.
5. Royal T Electric came in this month to finish the installation of the water plant's new transfer switch for the emergency generator this month. The emergency generator was serviced and set up with the new transfer switch by the Cummins Rocky Mountain service technician. The emergency generator system is now functioning properly with monitoring improvements now tied into the plant's SCADA system.
6. Transformer replacement work by YVEA at the wastewater plant continued this month after the staff found a problem with the new transformers being undersized and unable to work properly at the plant's peak start up voltage loads. Damage occurred to some of the existing plant equipment as a result of the transformers being undersized. Presently YVEA is reevaluating the transformer size requirements and will get new transformers on order and replace the existing ones as soon as they come in.
7. Royal T Electric also came in this month to do the electrical installation work for the water plant's new chlorine, fluoride, pH, and temperature in-line analyzer.
8. Finally, throughout the month the staff assisted or worked with other city departments, vendors, customers, and contractors as needed. The staff continued to work on building & grounds maintenance, equipment repair, and the cross connection control program.

Distribution System Operation/Maintenance

1. All service lines and water mains were located and marked as required. There were 4 line locates required and completed this month.
2. All work orders, and service line inspections requested or scheduled were completed.
3. The staff painted the interior piping at the 1st Street Bulk Water Sales Station this month.
4. The valve exercising program was worked on by the staff with 15 valves being exercised this month.
5. The staff repaired 3 water main breaks that had occurred during the month.
6. The staff was called out (emergency) 2 times this month to shut water off at the curb stop due to a broken pipe on the homeowner's side of the water service line.
7. What appeared to be 2 new valves leaking in Shadow Mountain, the phase 1 contractor (Rundle) was called in to make repairs this month. They excavated the area and found the valves were not leaking; however the water that was flowing up out of the valve boxes was flowing through an old main which was cut out of the system. It was thought that maybe one of the new main fittings was leaking and flowing through the old main, and since the suspected fittings were in a very bad spot in relationship to other underground utilities, and the amount of water leaking was small, it was decided to wait and have the phase 3 contractor fix it in 2016.
8. Finally, the staff continued to assist other city departments and contractors as needed. The staff cleaned the shop, office area, vehicles, performed minor repair and maintenance work on various shop equipment, and worked on updating the CCC program files.

Note: The staff was able to perform their regularly scheduled maintenance this month. They were able to assist contractors, and complete all emergency assignments as required.

Water Production Statistics

12-01-15 to 12-31-15

Effluent Total Flow	= 29,106,000 gallons	Total Chemical Cost	= \$ 3,430.05
Backwash Total Flow	= 946,700 gallons	Total Chemical Cost/Mg	= \$ 114.13
Total Flow	= 30,052,700 gallons	Alum & Ash Cost/Mg	= \$ 83.34

(Backwash Flow % of Total = 3.25%)

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Craig Irrigation Ditch
Fortification Creek Ditch

Deep Cut Ditch
Craig Water Supply System