



ELBERT CREEK
WATER COMPANY

WATER IN THE WORKS

AN ELBERT CREEK WATER COMPANY QUARTERLY NEWSLETTER
ISSUE 1/APRIL 2020

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A Message from ECWC

Hello, and welcome to the first issue of *Water in the Works*, a quarterly newsletter published by Elbert Creek Water Company (ECWC). The purpose of this newsletter is to improve communication between ECWC customers and staff while providing customers with useful and informative articles, ideas, and updates about our distribution area.

2019 Projects and Accomplishments



- Built underground concrete vaults for the river water and reclaimed water meters
- Repaired major water breaks near Pinecone and Glacier Ponds
- Cleaned the entire clearwell and initiated an annual cleaning program
- Retrofitted the lift station at Crescent Ridge
- Fixed the air pump in the settling pond
- Repaired the #3 motor in the booster station at Glacier Cliff
- Retrofitted the river pump for the Animas River Project
- Repaired the discharge elbow in the Elbert Creek intake pump and replaced the control panel
- Built an enclosure to keep air lines to the effluent pond from freezing

Current and Upcoming Projects for 2020

- Scheduling excavations and preparing for final water meter installs
- Working through the design phase for our wastewater treatment plant upgrade
- Routine hydrant flushing to maintain water quality
- Goulding Creek lift station repair and PRV rehabilitation
- Static pressure testing for leak detection to help reduce transmission loss

Transmission Loss and Water Leaks

In an effort to reduce transmission loss, ECWC staff is working around the clock to locate leaks in the water lines throughout the distribution system. This is a tough project because water leaks can be extremely small, and don't always present themselves in an obvious way.

How You Can Help

Leaks can sometimes look like natural springs, runoff, or puddles that may at first seem normal. If you see water presenting itself like this in places where you haven't seen it before, please call or email us. With such a large distribution spanning a diverse ecosystem, reducing transmission loss will take effort from all of us. Thank you for your help and participation!



New Irrigation Procedures for the 2020 Season

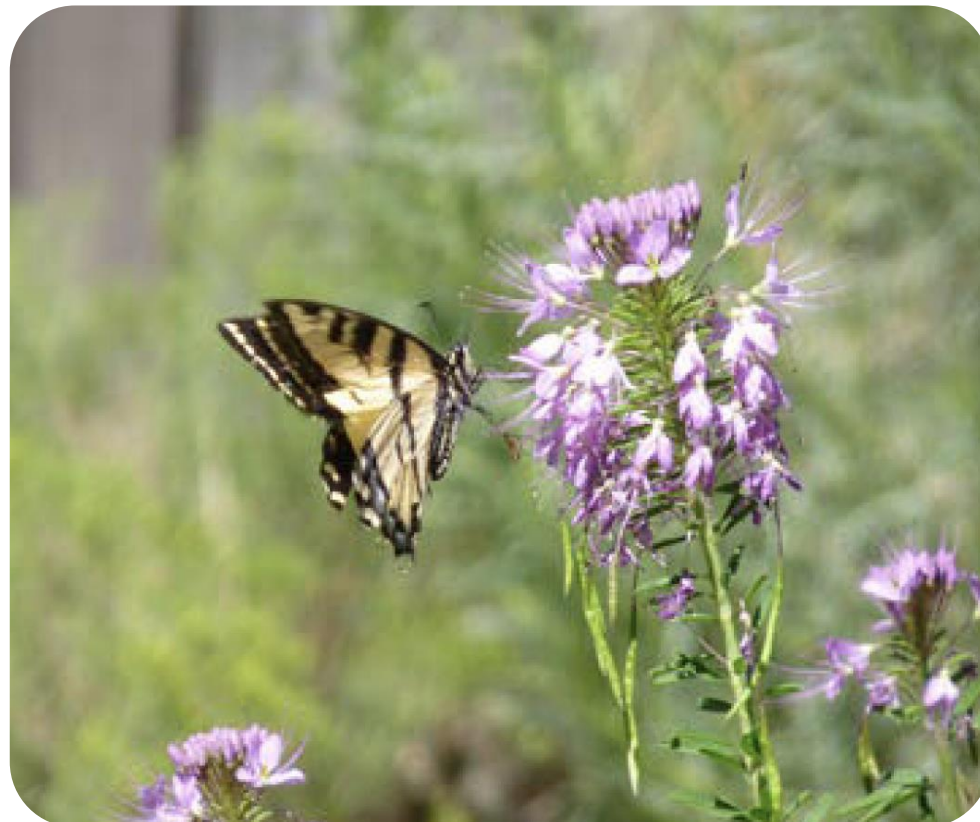
Summer is approaching quickly, and with it comes irrigation season. Incorrectly irrigating landscaping has the potential to drastically increase water bills and misuse water, a precious resource in our arid climate. To help homeowners curb rising water bills and conserve water, ECWC has implemented new water conservation procedures.

Landscape watering is not allowed between 6 AM and 9 PM. Single family homeowners with odd numbered addresses may irrigate up to three times per week on Tuesdays, Thursdays, and Saturdays. Those with even numbered addresses may irrigate up to three times per week on Wednesdays, Fridays, and Sundays. *Violators of this policy will receive a one-time written warning. Two or more violations will result in a series of escalating fines, as detailed on page 11 of the ECWC Rules and Regulations* (<https://elbertcreekh2o.com/wp-content/uploads/2020/04/ECWC-Water-and-Sewer-Rules-and-Regulations-02-18-20.pdf>). Daily property patrol will continue to take place to ensure conservation policy rules are being followed.

(For more details, view ECWC's Rules and Regulations and Appendices B and C at this link: <https://elbertcreekh2o.com/documents/>)

Interested in making your garden more water-wise?

In addition to decreasing your irrigation times and altering your watering schedule, you may want to consider adding low water, low maintenance native plants to your garden. If this interests you, you may find this booklet helpful: <https://conps.org/wp-content/uploads/2017/08/Low-Water-Native-Plants-for-CO-Gardens-Mountains.pdf>. It discusses gardening in Colorado mountain regions above 7,500 feet, including which types of plants thrive in our area and how to care for them properly. It also includes detailed landscape design suggestions. Published by the Colorado Native Plant Society in partnership with CSU, The Butterfly Pavilion, and others, it is a thoroughly researched piece that also includes further suggested reading on topics related to native planting.



COMING UP!

On **May 27th at 10 AM**, Glacier's Landscaping Team will be holding a seminar on drought-tolerant plants and other key topics aimed at updating landscapes to reduce outdoor water usage, including low water landscapes and xeriscapes. If Covid-19 restrictions have been lifted by May 27th, the seminar will be held at Prospector Hall in the Valley Clubhouse. If restrictions are still in place the seminar will be held via a Zoom conference call. More details will be sent out a week before the seminar.

Did You Know?

Hello, and welcome to our first “Did you know?”! In my time with the City of Durango I learned a lot. The former director of Utilities strongly supported education and certification. Part of this process was having an operator who was on-call write a short essay called a “Did you know?”. Often thought of as homework, its intention was to keep an operator thinking after work hours. I thought this would be a good opportunity to create an educational moment. Every one of us plays a part in the continued success and sustainability of these water and wastewater systems. Your feedback is valuable to me! I cannot make sure we are providing you the best service unless you provide feedback. So, let’s open up a dialogue and talk about water and wastewater. My wrestling coach always told us, “Steel sharpens steel.” These conversations also help keep me sharp through explanation and maybe you’ll learn something you didn’t know before. So, let’s begin.... -Sean Young



Pressure Reducing Valves

Because we live in a remote, mountainous area, our water system faces unique challenges that others may not. One unique feature is that most of our clientele is seasonal. This, coupled with the hardness of our water, presents an interesting challenge when it comes to pressure reducing valves (PRVs). I mention this because we have already received several calls about service outages. When customers come back from being away and turn the water on for the first time, sometimes there is no flow. Elbert Creek Water Company does not shut down water services when customers leave town. So, what's going wrong? As mentioned before, our water has hard and scaling characteristics. This is due to the source water that is available to us. Therefore, when moving parts in the water system aren't used for a while, they can often seize up because of a buildup of minerals. I have been out on a few of these calls where the customer can't seem to figure out why the water is not working. I always inspect the PRV. More times than not, a light tap with a wrench will break up the mineral build up, freeing up the PRV and restoring water flow. The PRV had been stuck closed due to a buildup of minerals caused by inactivity. When a customer is present and using water daily, appliances are getting exercised and this problem should not occur.

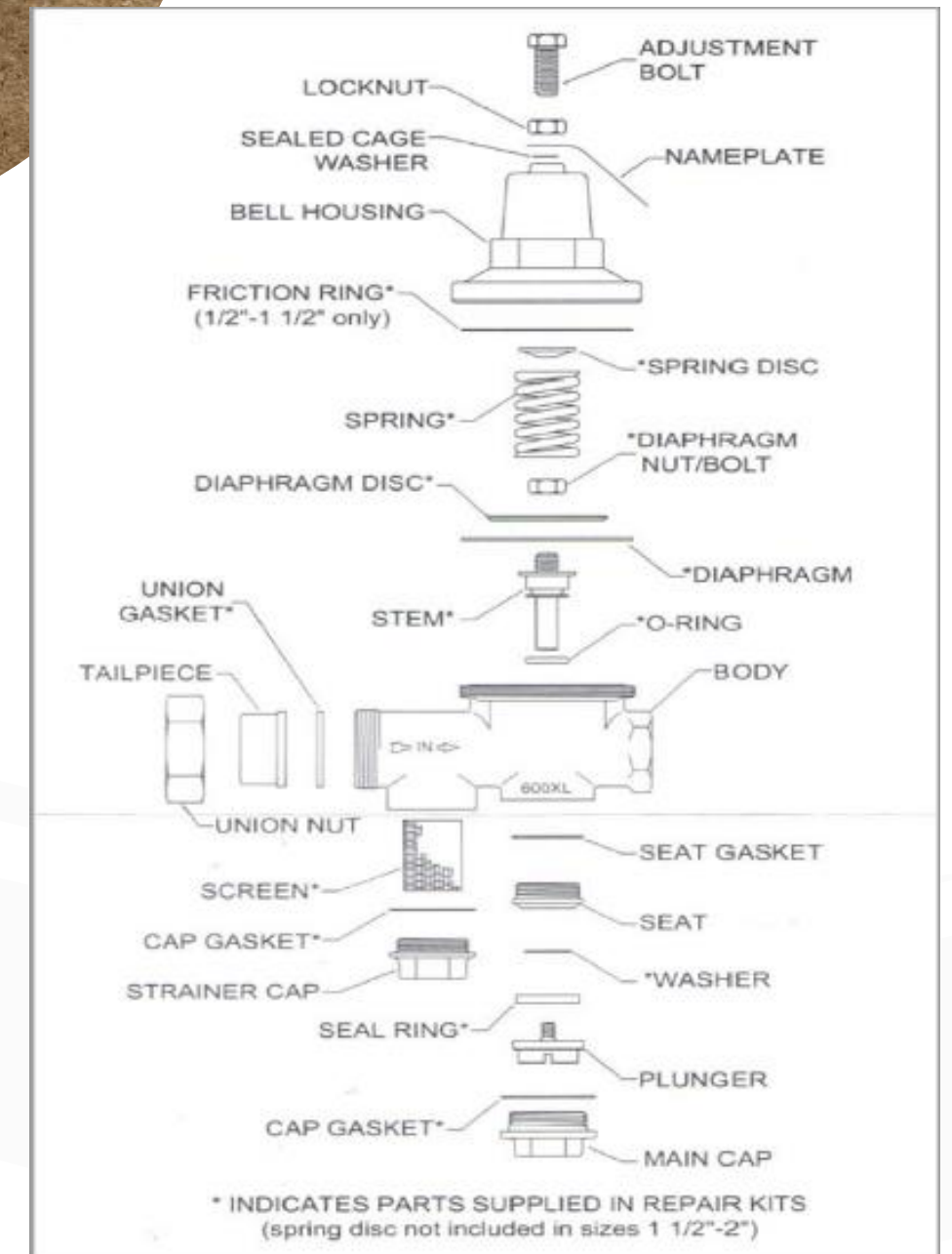
Some of you may already be familiar with this situation and what a PRV is. For those who don't, let's take a small step back and talk about what PRVs do and how they work. "The Ten States Standards," which has been adopted by many states, stipulates that water systems "shall be designed to maintain a minimum pressure of 20 psi (140 kPa) at ground level at all points in the distribution system under all conditions of flow," (Lauer, William. *Water Distribution Operator Training Handbook*. Denver, American Water Works Association, 2013). While Colorado is not one of those ten states, we try to observe the industry standard to the best of our ability. Since our system is in the mountains with many elevation changes, the system requires PRV stations to help maintain pressure. Even with these assemblies in place, it may not be enough for homes in higher pressure zones. It is recommended that homeowners install a smaller PRV in their homes on their internal plumbing. This helps preserve the life of appliances. A PRV is usually the first assembly you will see after the water service line comes through a home's foundation. They come in various pressure setting ranges according to your home's needs. For example, a PRV with a setting from 25-75 psi should be adequate for most smaller homes, but a much larger house with more

Pressure Reducing Valves (continued)

appliances that are creating more demand may need a higher-pressure range. Three of the most critical components in a PRV are the screen, the spring, and the seat. Below, you can see an exploded parts picture of a PRV and a picture of a PRV assembly. The screen is important because it can catch debris that could possibly be in the water lines. Without the screen, debris can sit on the seat and the PRV will not fully close. If it stays on the seat, debris can press into the brass or rubber and create a small hole. This can cause the PRV to not work properly. The other critical component is the spring. Springs can wear out over time. If your PRV has never been replaced and you are experiencing high pressures, you may want to replace it.

There are more nuances to PRV's. Today I just wanted to talk about the basics. So, if you happen to be stuck in your home now and you are bored, look at your PRV. I wouldn't recommend tearing it apart or changing the setting. I would recommend talking to a plumber if you decide to go that route. Take a good look at the PRV think about what it does and how it works. Now you know.

Be well out there, everyone.



A Note from Jim Goodman About ECWC's New Rate Structure

Dear Elbert Creek Water Company Customers,

This letter provides additional details regarding the 2020 ECWC rate structure and why the rates have increased over previous years. Over the past three years, ECWC has invested heavily in many critical water and wastewater capital projects that have improved the reliability of the ECWC water and wastewater systems by bringing critical system components up to modern standards and requirements. The debt related to these capital improvements is a major driver of the rate structure. Highlights include:

- **Water Treatment Plant Upgrade:** Recently completed a thorough upgrade and automation of the water treatment plant. Project cost: \$2,916,839
- **Reconstruction and Rehabilitation of the Animas River Intake:** The project included the rebuild of the intakes along with new pumps and booster pumps, along with completely automating the intakes and pumps. Project cost: \$867,177
- **Water Meter Project:** Install water meters to track usage for ECWC customers. Project cost: \$541,485
- **Upcoming Wastewater Plant Upgrade:** In 2020, ECWC will embark on a thorough upgrade and automation of the wastewater treatment plant. The project is slated to be completed by 2021. Estimated project cost: \$1,000,000 expenditure in 2020; \$1,500,000 to \$2,000,000 expenditure to complete the project in 2021.

As a result of the water metering installations and subsequent data, we began to see that we were producing more water than was being billed through the meters. With our first year of substantially complete water meter usage data (for 2019) for all ECWC domestic water customers we were able to identify the transmission loss issue. ECWC billed all ECWC metered customers for approximately 23 million gallons of domestic water usage in 2019. The meters on our water treatment plant indicated we produced roughly 50 million gallons of domestic water in 2019. ECWC is working with our team and outside engineers to identify and repair transmission loss. Reducing this loss will have a substantial impact on lowering volumetric water rates.

Lastly, as we analyzed the operations and consulted with the Advisory Board, we increased 2020 operating and maintenance expenses. A large portion of this year over year increase is the hiring of a General Manager as well as the costs related to preparing audited financial statements. Audited financial statements will allow ECWC to look at other traditional lending institutions for the servicing of its debt at potentially favorable terms.

The decision to set rates has been based on careful analysis by outside consultants with BBC Research and Consulting. The methodology and outcomes have been rigorously reviewed by the members of the Elbert Creek Advisory Board and management. We are committed to providing the best water and sewer utility service possible while providing for a financially viable and sustainable operation for generations to come.

Sincerely,

Jim Goodman
Chief Operating Officer

Please see the following page for ECWC's 12 Month Pro Forma Summary Income Statement

**Elbert Creek Water Company
12 Month Pro Forma
Summary Income Statement**

Revenue		1,249,100
Labor, Benefits & Taxes		226,458
Operating Expenses *		<u>454,542</u>
Net Income		<u>568,100</u>
Debt Service - Domestic System		301,821
Debt Service - Wastewater System		87,957
Debt Service - Raw Water System		72,464
Reserve Contribution		<u>106,000</u>
Net 12 Mth Cash Flow		<u><u>(142)</u></u>

* Operating Expenses includes items such as: Water & Storage Costs, Utilities, Chemicals, Repair/Maintenance, and Accounting/Audit Expenses