



ELBERT CREEK  
WATER COMPANY

# WATER IN THE WORKS

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AN ELBERT CREEK WATER COMPANY QUARTERLY NEWSLETTER  
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## *IN THIS ISSUE*

- Introducing ECWC's new ORC
- How are ECWC's rates designed?
- Examples of estimated water bills for 2021
- An update on ECWC's wastewater treatment plant upgrade
- 15 Year-Old water scientist named *Time's* Kid of the Year

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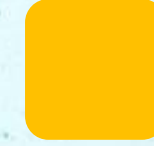


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# A Message from ECWC

Hello, and welcome to the fourth 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. In this issue we welcome our new ORC and discuss 2021 rates and updates.



# Welcome Logan Hartle, ECWC's New ORC

Hello ECWC Customers,

My name is Logan Hartle, and I am very excited to be joining the team as the Operator in Responsible Charge for Elbert Creek Water Company. I grew up on Colorado's western slope where I gained a deep respect for and fascination with water in the West. My education and work experience has since been focused on water quality in Colorado. I have been working in the water/wastewater industry for over six years and I currently hold my Wastewater Treatment A and Collections 1, and Water Treatment A and Distribution 2 licenses. I completed my bachelor's degree in geology with an earth science focus at Fort Lewis College, and obtained a graduate certificate in water resources from Colorado State University. I love living in Durango and take advantage of all the outdoor sports southwest Colorado has to offer. I look forward to serving the communities in the ECWC service area and providing safe, reliable water.



# How Elbert Creek Water Company's Rates are Designed

By Michael Verdone, Director at BBC Research and Consulting

Elbert Creek Water Company (ECWC) provides two types of water service to its residential and commercial customers: treated water service and wastewater service. Treated water is the water that ECWC diverts from various sources, treats according to drinking water standards, and distributes to its customers for use. Any treated water that is not used for irrigation purposes is sent to the wastewater treatment plant for processing before it is discharged. ECWC also operates a raw water system for its golf courses, but the costs of operating that system are paid by Glacier Club, so that system is not discussed here.

Operating the treated and wastewater systems costs ECWC about \$1.2 million per year. Most costs are related to the direct operations of each system (e.g., labor, electricity, supplies, etc.) and the re-payment of debt-funded capital investments. A small portion of costs are also created by the formation of a cash reserve to help ECWC navigate unexpected events.

ECWC's water rates are designed to recoup the full costs through a fixed charge and a volumetric charge. To do this, the costs of the treated water system are allocated to each customer class based on the class's total water use, peak water use, and average water meter sizes. Together, these three factors determine the cost share of each customer class. The costs of the wastewater system are allocated to each customer class based on its wastewater use and average water meter size.

Next, fixed rates and volumetric rates are calculated to ensure that each customer class pays its fair share of costs. Customers within the same class all pay the same fixed rate and all customer classes pay the same volumetric rates, although the consumption tiers do vary. In addition to recouping ECWC's costs, the water rates are also designed to be stable and equitable. This means the rates generate a steady stream of revenue for ECWC and that each customer class pays its fair share of the costs based on its historic pattern of use.

Finally, it is important to note that water rates have to be updated regularly to ensure the utility is fully funded and that the rates account for changes in water use and the utility's underlying cost structure. ECWC has made significant investments in its billing system and infrastructure over the last few years and these investments have caused ECWC's water rates to change each year, sometimes significantly. With most investments having now been made, we expect ECWC's water rates to be more stable going forward.



## Example 2021 Water and Wastewater Bills

Customer Class	2021 Projected Monthly Use (1,000 gals)	Monthly Bill (2021 Rates)	Monthly Bill (2020 Rates)	Change	Domestic and Wastewater Use	Domestic and Wastewater Revenues
Single Family	7.0	\$236	\$223	\$13	31%	30%
Multi Family	2.9	\$171	\$124	\$47	11%	11%
Business	7.1	\$428	\$189	\$239	9%	9%
Tamarron	1.1	\$58	\$64	-\$6	22%	21%
Irrigation	43.7	\$1,111	\$419	\$692	27%	25%
Vacant Lots	-	\$41	\$63	-\$22	0%	3%
Raw Water	58.3	\$13,744	\$11,548	\$2,196	-	-

On December 1<sup>st</sup>, 2020, all ECWC customers were sent a package of information via email regarding the new water rates for 2021 (which took effect on January 1<sup>st</sup>, 2021). Many customers have asked questions about the bill percentage increases that they can expect from 2020 to 2021. The chart above was taken from the 2021 Rate Presentation that was sent out to all customers. This chart shows estimated average monthly bills for each customer class between 2020 and 2021, based on usage data for each customer class. This rate presentation is available in full at [www.elbertcreekh2o.com](http://www.elbertcreekh2o.com).



# ECWC is Upgrading!

Elbert Creek Water Company (ECWC) has undertaken efforts to modernize operations over the last several years by investing in critical infrastructure to sustainably support the community. In 2018 the domestic water treatment plant was upgraded to include a modern membrane ultrafiltration system. In summer 2021 ECWC will start a replacement-in-kind upgrade to the wastewater treatment facility. This upgrade will improve the aging equipment, increase the plants longevity, and improve safety and operations. The upgrade will also ensure that all water quality standards will continue to be met with future growth. The replacement-in-kind upgrade is scheduled to be completed in winter 2021/2022 and will be using the existing treatment facility building without a footprint expansion. Investing in infrastructure will support the community and ensure excellent water quality in the future.





# 15-Year-Old Water Scientist Named Time's First-Ever "Kid of the Year"

By Peter Chawaga, featured by *Water Online* on December 15, 2020

In a nod to the fundamental importance of clean water, *Time* magazine has awarded its first ever "Kid of the Year" designation to Gitanjali Rao, a 15-year-old who invented a mobile device that can detect lead contamination in drinking water.

This is the latest in a long line of prestigious recognition for Rao, who has also been named to Forbes "30 Under 30" list. "She won praise in 2017 when she responded to the Flint, Mich., water crisis by creating a device named Tethys, using carbon nanotube sensors to detect lead in water," NPR reported. "The Lone Tree, Colo., native was named America's Top Young Scientist when she was in the seventh grade. She went on to collaborate with scientists in the water industry to try and get the device on the market."

A public health emergency was declared for Flint in 2015 after a switch in water sources leached lead through outdated infrastructure and into drinking water. The incident proved to be one of the highest-profile drinking water contamination sagas in modern history and, aside from foundational fixes like pipeline replacement, lead-detection devices like Rao's could help keep consumers safe.

Rao was inspired to create Tethys after watching her parents leverage a popular alternative, testing their drinking water for lead with an at-home strip kit. She thought she could create a device that would more accurately detect the harmful contaminant. "Here's how it works: Carbon atoms link together in a beehive shape and connect to create a tube — a nanotube," NPR explained in a previous report. "The carbon nanotubes respond to changes in the electron flow. If there is lead in the water, the lead sticks to the carbon ions, creating resistance. Tethys measures that resistance and sends the data to a smartphone app to give the status of lead in water."

*Time's* Person of the Year award has been granted for 92 years, but this is the first time a Kid of the Year has been named. "This year, Time partnered with Nickelodeon to search social media and school districts across the country to find the most influential kid of 2020," *USA Today* reported. "The list was narrowed down from 5,000 young Americans to five finalists, who will each receive a cash prize and be given a chance to contribute to the magazine." Of the finalists, Rao's innovative work earned her the title. She plans to continue her promising career in developing scientific solutions to pervasive problems, including work on a way to detect biocontaminants like parasites in water.