



TOWN OF ELIZABETH

MICHAEL DEVOL/PUBLIC WORKS DIRECTOR

TO: Honorable Mayor, Mayor Pro-Tem and Town Board of Trustees
FROM: Mike DeVol, Public Works Director
DATE: January 28, 2025
SUBJECT: Public Works Monitoring Report

***Town Street Paving Improvements Project:**

1. Ongoing projects for the year 2025.

***Town Main St. Decorations:**

1. Will remain down for Mainstreet Streetscape project.

***Town Wells, Tanks and Effluent:**

1. Denver D-1 Well has been pulled for maintenance and video camera recording. Once the Video has been evaluated for Well casing condition, PW will decide what type of treatment if any needs to take place before reinstalling. Inspection of the pump, cable, and air lines will take place before reinstallation.

***Town Water Line (NON) Emergency Repair:**

1. 476 S Paddock St (rental) a neighbor reported a frozen water line leaking. PW arrived to find a garden hose had not been drained or disconnected and in turn froze. PW turned off service at the curb stop. PW contacted and met the property owner. The property owner did not know the renter had moved and turned the gas off, so there was no heat in the house for over a month. The property owner closed the valve in the basement and PW turned the service back on to allow owner to assess the number of frozen pipes using his valve.

***Town Hall/ Repairs/ Landscaping Plan:**

***Town Walkway Repairs:**

***Town Street Maintenance/Striping Projects:**

1. Striping will take place in the spring/summer of 2025 as needed.

***Town Snow Plowing and Street Sweeping: SNOW SEASON IS UPON US!!**

1. The Town Newsletter included Town Plowing Code and Snow Route "NO PARKING" information.



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2. PW has been plowing and applying salt/sand as needed. Clean-up continues as storms subside.
3. PW continues educating property owners of their responsibilities and the Town's actions during and after storms.

***Town New Wells at Ritoro/Gold Creek Valley:**

1. The new Wells building is complete, and PW is planning an Open House Grand Opening in the spring of 2025.
2. Landscaping will take place in 2025 depending on item #1. PW will work with the 4 adjacent property owners for their approval of the landscape sketch to ensure that we conceal as much of the building as possible from their views.

***Town Trail Project:**

***Gold Creek Lift Station Improvements:**

1. Completion of project has begun warranty period and filing completion with CDPHE Permitting.

*Eligibility Surveys for Water and Wastewater Capitol projects have been completed for 2024 and accepted by Colorado Department of Public Health and Environment (CDPHE). The eligibility surveys allow for the town to be in line for any funding that may be available for future projects.

***Gold Creek Wastewater Treatment Plant (GCWWTP)**

The state sampling of the plant after maintenance all came back at 98% removal of all constituents that are required. It was an excellent slow start up of Train 2 and the plant is back at 100% capacity.

Maintenance has been concluded on Train 2 of the plant. PW did a slow 2-week plant start up on Train 2 of the plant to allow bugs/bacteria to acclimate and begin their life cycle. The combination of Bug population, Dissolved Oxygen and liquid temperature are the biggest contributors to a happy healthy working bug population as they work chemical free to complete the process of naturally treating the water.

1. NO CHANGES AS OF THIS REPORT-On going Project/ The new fine screen replacement unit has been installed. The new screen has been in automated operations for three months with no issues. Epoxy painting of replaced parts continues as weather allows before being placed back in service.



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2. PW has been working on Plant maintenance by drawing down (treating in Train 1) all liquid levels of Train 2/South side of the treatment plant for inspection and repairs as necessary. The Clarifier for Train 2 has been completely emptied, hosed and vacuumed out for a clean working area. The clarifier drive motor tested out fine as well as the gear reduction box. There is wear and damage to the Drive Shear Pin and Paddle arms that distribute settled sludge to the bottom of the clarifier for removal through pumping and sent to digestors for final degradation and trucked to farm fields as fertilizer. PW should have the Clarifier back up and fully operational by the end of September dependent on parts shipping.
3. Just a quick review of the Wastewater Plant: It is designed to treat 500,000 gallons of Raw Sewage per day. Train 1 and Train 2 share that equally. Train 1 currently is treating 190,000-200,000 gallons per day while maintaining our minimal 85% reduction constituent removals (currently 93%-99% removal) that are set by CDPHE in our Permit (excellent test for me as an operator and all equipment). Currently we are operating one Train at basically 80% capacity and operating very well. This is a test never completed before as our available capacity is 500,000 gallons. When the time comes that the wastewater Plant is treating at 80% (400,000 gallon) of the Total Capacity the Town must start to show Plant Expansion Plans to CDPHE. The current WTP upgrade Budget is currently in good shape for funding. Reference of constituent removal: Please see attached Laboratory Sampling Analysis for actual numbers while completing maintenance of one train. Note all numbers/results are shown as milligrams per liter (mg/L) this equates from metric to Standard as parts per million (ppm). Plant is 100% Biological/Bacteria (Bugs) NO CHEMICALS

Bio-chemical Oxygen Demand (BOD) minimum 85% removal (current average 99% removal)

Total Suspended Solids (TSS) minimum 85% removal (current 93%-99% removal)

Nitrogen/Ammonia (NH₃) minimum 85% removal (current 99% removal)

E. Coli maximum 115 parts per million (ppm) (current <1 ppm) U.V. Light neuters bacterial for no reproduction and does not kill the bacterial which in turn means no chemicals and cost savings to the Town residents.

*Town Clean Up Day/ Paint Round-Up/Arbor Day

1. Town Clean Up Day Results are as follows:
2. Electronics:
 - a. Batteries – 58 lbs.
 - b. Computer Materials – 374 lbs.
 - c. Display Materials – 2,144 lbs.
 - d. Mixed Electronics – 1,400 lbs. Total Cost - \$2,708.45
3. 7 – Roll-Off Dumpsters (2 Metals) (5 Garbage). Total Cost - \$2,331.75



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4. Flat Fee for 4 hours shredding of documents or paper. Total Cost - \$1,222.95
- Grand Total - \$6,263.15

***Town Public Works News**

1. Public Works has one Water/Wasterwater position open for 2025.

***Town Farmers Market:**

1. Event Park Name is Running Creek Park, and the events have ended for the year.

***Town Parks and Right of Way**

Upcoming Projects:

1. PW has begun for 2024 the following Annual Reporting:
2. Annual Biosolids has been completed for 2023 and sent to CDPHE.
3. Regulation 85 Nutrient Monitoring/Accepted by CDPHE
4. PW has completed a round of PFAF's (radiation/radiological). Results have been reported to CDPHE.
5. Water Augmentation and Recording
6. Water Lead and Copper sampling
7. Water Constituents Metals Sampling
8. Annual DMR (Daily Monitoring Report) Gold Creek Wastewater Plant
9. Tree City USA Application/ Accepted and approved by Tree City USA/Pending
10. Trail DOLA findings and Inspections/ Addition of Willow Cuttings Planted
11. PW has completed Highway User Tax Fund (HUTF) reporting and data processing.
12. PW is completing Lead and Copper testing per CDPHE guidelines for 2023/2024
13. Flushing of the entire town's water supply system is completed every 6 months.

Mike DeVol
Town of Elizabeth
Public Works Director
GCWWTP Operations
303-913-6453
mdevol@townofelizabeth.org