

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC PURCHASED WATER)	CASE NO.
ADJUSTMENT FILING OF CALDWELL COUNTY)	2023-00419
WATER DISTRICT)	

CALDWELL COUNTY WATER DISTRICT’S RESPONSE
TO COMMISSION STAFF’S FIRST REQUEST FOR INFORMATION

As of January 2, 2024, Caldwell County Water District hired a new Superintendent, Cody Kirby. The responses to “Appendix C” are answered to the best of the new Superintendent’s ability due to only being with the district for a month and a half. Mr. Kirby, formerly a circuit rider for Kentucky Rural Water Association, has a vast knowledge of the contributing factors of which water loss occurs and how to correct these issues, within the financial means of the district.

1. QUESTION: Refer to Caldwell District’s Annual Reports for the years ended December 31, 2020, December 31, 2021, and December 31, 2022. Reported Water Loss was 14.8767 percent for year ended 2020, 19.5933 percent for year ended 2021, and 29.3435 percent for year ended 2022. Provide a detailed explanation of all factors contributing to the increased water loss.

RESPONSE by Superintendent, Cody Kirby: I have reviewed the District’s Annual Reports for the years 2020-2022. No discrepancies were observed with the overall reporting. The purchased water as well as water sold matches all records from billing statements. No unusual amounts of flushing, leak accountability or excessive unmetered water was reported.

2. QUESTION: Explain the efforts Caldwell District has made to address its increased water loss.

RESPONSE by Superintendent, Cody Kirby: The efforts to address the water loss issues are in full progress. The following are new tools/implements the district is utilizing for water loss recovery efforts:

- a. Portable Flow Meter to excavate lines and utilize valves to find water leaks.
- b. Acoustic Listening Devices to perform leak surveys in areas where water loss may seem high, with guidance from purchased water master meters.
- c. Daily Master Meter readings recorded along with off demand readings in GPM to coincide with customer count/demand factors for purchased water master meter zones.
- d. The district will be installing more zone meters for additional leak detection.
- e. Currently, having manual water meter reader employees, visual inspections of meter boxes and yards are occurring monthly.
- f. All work orders concerning a leak investigation are being completed the same day they are processed.
- g. The district will be changing out approximately 450-500 residential water meters in the 2024 calendar year. This is for PSC compliance along with consumption analysis records showing an abundance of water meters may not be performing up to the required testing percentage of accuracy for billing.
- h. Monthly consumption analysis and billing records are monitored in depth by district management.
- i. Remaining in compliance with purchased water meter yearly testing.

3. QUESTION: Explain whether Caldwell District has identified the source or sources of its current water loss, and identify the source or sources.

RESPONSE by Superintendent, Cody Kirby: The district has worked tirelessly to identify the source or sources of its current water loss. The following are sources that the district feels contributes excessively to its current water loss:

- a. Residential Water Meters. The district has 2191 active accounts (as of January 2024), and of those 2191 accounts/water meters, 938 accounts/water meters (43% of active meters) are being billed for under 2,000 gallons per month. 493 accounts/water meters (23% of active meters) are being billed for under 1,000 gallons per month. Nearly $\frac{1}{4}$ or 25% of the district customers are paying a minimum bill, as it is based on 1,000 gallons.
- b. Purchased Water Meters and District Manual Reading. The district is billed for purchased water based on a calendar month. The district customer meters are being read all through out the month, generally taking a full month to manually read. The district is not able to reflect true sales of gallons that will coincide with the purchase meters from the supplier. Therefore, the whole customer base is splitting the month up due to when the meter is read. The meter routes are read monthly around the same time (within a few calendar days) of the previous month which allows more of a true month to month customer billing accountability, but the numbers will never be accurate with the purchase meter.
 1. The district is actively seeking funding from various resources to implement a full meter change out program for the district. Once funding is available,

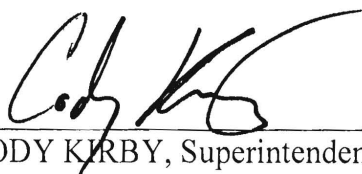
the district will install either drive by radio read meters or AMI/cellular meters.

2. The district will be deciding in the coming weeks about which meter they will want to move forward with and begin ordering the meters. The district may have to self-finance a majority of the meter changeouts due to lack of grant funding and the importance of changing out poor performing meters. The district hopes to see some month-to-month recovery while changing out the 23-43% of meters that are seemingly under registering.
- c. Failing Water Service Lines. The district has repaired or replaced more than 6 water service lines in the past 30 days due to failing pipe breaking. Most of the service lines being repaired or replaced have been repaired previously. The water service line is brittle and old. The new Superintendent has begun implementing a full water service line replacement upon excavating for any reason on a service line.
 - d. Unknown Main Line Water Valves and Asset Management and GIS project. The district has a limited number of main line water valves that are known in the system. The Superintendent and field staff are reviewing records and as-built maps to locate buried or hard to find valves and marking them appropriately in the field along with GIS attribute locating. It has been reported that previous management and staff performing a leak repair where water would need to be shut off to complete were turning off zone meters, resulting in up to 50 miles of water mains depressurized. When the water was turned back on, the district could only utilize very few flush hydrants and air release valves to limit pressure or water hammer contingencies resulting in other leaks occurring.

The district is actively trying to resolve all water loss factors and make repairs or replace infrastructure that is contributing to water loss. As explained above, the district feels that one of the worst impacts to the current water loss is in residential metering and billing time frame not coinciding with the purchased water meter billing and hopes to address these issues with grant funding or another source of financial assistance. Moving forward with the new water district management, the district will continue its efforts with water loss control and repair or replace known sources contributing to the excessive water loss, within the financial means of the district.

CERTIFICATION

CODY KIRBY, Superintendent of the Caldwell County Water District states each response is answered under oath and the responses are true and accurate to the best of his knowledge, information, and belief formed after a reasonable inquiry.



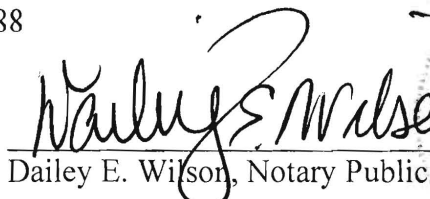
CODY KIRBY, Superintendent
Caldwell County Water District

STATE OF KENTUCKY
COUNTY OF CALDWELL

Subscribed, sworn to and acknowledged before me by CODY KIRBY, Superintendent of the Caldwell County Water District, this 23rd day of February, 2024.

My commission expires: August 10, 2025

My commission number: KYNP32488

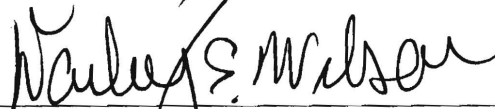


Dailey E. Wilson, Notary Public



Respectfully submitted,

WILSON LAW FIRM, PLLC

A handwritten signature in black ink, appearing to read "Dailey E. Wilson", written over a horizontal line.

Dailey E. Wilson

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Attorney for Caldwell County Water District