

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

**ELECTRONIC INVESTIGATION            )  
INTO THE MEASURING,                 )  
RECORDING, AND REPORTING OF    ) CASE NO. 2018-00394  
WATER LOSS BY KENTUCKY'S         )  
JURISDICTIONAL WATER             )  
UTILITIES                                )**

**RESPONSE OF  
LAUREL COUNTY WATER DISTRICT NO. 2  
TO  
COMMISSION'S REQUEST FOR INFORMATION  
DATED DECEMBER 18, 2018**

**FILED: January 11, 2018**

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

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ELECTRONIC INVESTIGATION )  
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WATER LOSS BY KENTUCKY'S )  
JURISDICTIONAL WATER )  
UTILITIES )

CERTIFICATION OF RESPONSE OF  
LAUREL COUNTY WATER DISTRICT NO. 2  
TO COMMISSION'S REQUEST FOR INFORMATION

This is to certify that I have supervised the preparation of Laurel County Water District No. 2's Response to the Commission's Request for Information. The response submitted on behalf of Laurel County Water District No. 2 is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Date: 1/10/2019

Kenneth Fisher

Kenneth Fisher, Superintendent  
Laurel County Water District No. 2

## **LAUREL COUNTY WATER DISTRICT NO. 2**

### **CASE NO. 2018-00394**

#### **Response to Commission's Request for Information**

##### **Question No. 1**

##### **Responding Witness: Kenneth Fisher**

- Q-1. Explain in detail the manner in which you measure, calculate, and track water loss, and:
- a. Identify whether you use any manual form (including Excel spreadsheet) or electronic or mechanized system to calculate and track water loss.
  - b. Provide a copy of any form used (including Excel spreadsheet).
  - c. Identify the source of any form or system used.
- A-1. a. Laurel County Water District No. 2 (LWD No. 2) reads the Master meter daily at the treatment plant of the water leaving the plant and going into the distribution. Laurel County Water District No.2 reads all customer meters Monthly and the number of gallons billed on the billing report generated by United Systems is considered the water sold amount on the Monthly water loss report. The difference of water sold from water purchased is our water loss after adjustments are made for flushing, Fire department use, Water used in the water Treatment plant production, and filter washes.
- b. PSC Monthly Water Loss Report is attached to report.
  - c. Public Service Commission

**LAUREL COUNTY WATER DISTRICT NO. 2**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 2**

**Responding Witness: Kenneth Fisher**

Q-2. Explain in detail your understanding of the information to be provided in each of the categories on the Water Statistics page (reference page 30) of the annual report required of jurisdictional water utilities, accessed through the Commission's website.

A-2. Water Statistics (Ref. Page30)

1. Tracking of water bought and sold.
2. Amount of water produced.
3. Amount of water Purchased.
4. The total amount of water produced and purchased.
- 5.
6. Total water sold to LWD No. 2 customers.
7. Total water sold to LWD No. 2 residential customers only.
8. Total water sold to LWD No. 2 commercial customers only.
9. Total water sold to LWD No. 2 Industrial customers only.
10. LWD No. 2 has no bulk loading stations.
11. LWD has no resale.
12. LWD does not have any other means of sale.
13. Total water sales to all customers.

- 14.
15. Water used in the treatment plant production or Distribution.
16. Water used at LWD No.2 to wash filters and for the Water treatment plant production.
17. LWD has no wastewater plant.
18. Water used for annual flushing and Maintenance.
19. All water used for fire department emergencies, we cannot get our fire departments to send Monthly fire department usage so we use .1 percent on the Fire Department water usage form KRS 278.170. We have attached the report.
20. Water used at LWD No. 2 water office and meter test bench.
21. Total of all Known water use.
- 22.
23. Unknown water Loss.
24. Estimate of all known tank overflows.
25. We use a Monthly Excavation break report provided by Kentucky Rural water Association to figure up the gallons for line breaks. We have attached the report.
26. Estimate of all known line leaks.
27. Other known issues of water loss.

28. Total of all known water loss.

29. Total line loss divided by total water produced equals percentage of water loss for Laurel County Water District No. 2.

**LAUREL COUNTY WATER DISTRICT NO. 2**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 3**

**Responding Witness: Kenneth Fisher**

- Q-3. State any questions you have regarding how to use the updated Commission Form described and attached as Appendix A to this Order.
- A-3. Laurel County Water District No.2 has no questions about the updated Commission Form.

**LAUREL COUNTY WATER DISTRICT NO. 2**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 4**

**Responding Witness: Kenneth Fisher**

- Q-4. State any suggestions or improvements you have for the updated Commission Form described and attached as Appendix A to this Order.
- A-4. Laurel County Water District No. 2 has no suggestions or improvements for the updated Commission Form.



**LAUREL COUNTY WATER DISTRICT NO. 2**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 5**

**Responding Witness: Kenneth Fisher**

- Q-5. State any questions you have regarding how the information in the updated Commission Form described and attached as Appendix A to this Order is to be incorporated into annual reports.
- A-5. Laurel County Water District No. 2 has no questions regarding how information in the updated Commission Form is to be incorporated into annual reports.

**LAUREL COUNTY WATER DISTRICT NO. 2**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 6**

**Responding Witness: Kenneth Fisher**

- Q-6. State any concerns you have regarding the use of the updated Commission Form described and attached as Appendix A to this Order.
- A-6. Laurel County Water District No. 2 has no concerns about the updated Commission Form.

**LAUREL COUNTY WATER DISTRICT NO. 2**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

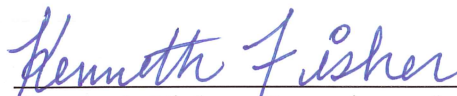
**Question No. 7**

**Responding Witness: Kenneth Fisher**

- Q-7. State whether you believe it is reasonable, proper, and appropriate for the Commission to require jurisdictional water utilities to maintain and use the updated Commission Form described and attached as Appendix A to this Order. Fully explain your answer
- A-7. Laurel County Water District No.2 believes it is reasonable, proper, and appropriate for the Commission to require Water Utilities to maintain and use the updated Commission Form attached as Appendix A. Laurel County Water District No. 2 believes that keeping water loss to a minimum is the key to running an efficient water district.

## CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8, I certify that Laurel County Water District No. 2's electronic filing of this Response is a true and accurate copy of the same document being filed in paper medium; that the electronic filing was transmitted to the Public Service Commission on January 11, 2019; that there are currently no parties that the Public Service Commission has excused from participation by electronic means in this proceeding; and that an original paper medium of this Response will be delivered to the Public Service Commission within two business days.



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Kenneth Fisher, Superintendent  
Laurel County Water District No. 2

# PUBLIC SERVICE COMMISSION

## Monthly Water Loss Report

Water Utility: Laurel County Water District # 2

For the Month of: December Year: 2018

LINE #	ITEM	GALLONS	PERCENT
1	<b>WATER PRODUCED, PURCHASED &amp; DISTRIBUTED</b>		
2	Water Produced	36,100	
3	Water Purchased	-	
4	<b>TOTAL PRODUCED AND PURCHASED</b>	<b>36,100</b>	
5			
6	<b>WATER SALES</b>		
7	Residential	22,179	
8	Commercial	4,228	
9	Industrial	4,711	
10	Bulk Loading Stations		
11	Wholesale		
12	Other Sales		
13	<b>TOTAL WATER SALES</b>	<b>31,118</b>	86.2%
14			
15	<b>OTHER WATER USED</b>		
16	Utility and/or Water Treatment Plant	1,277	
17	Wastewater Plant		
18	System Flushing	1,196	
19	Fire Department	311	
20	Other <u>office shop meter bench</u>	4	
21	<b>TOTAL OTHER WATER USED</b>	<b>2,788</b>	7.7%
22			
23	<b>WATER LOSS</b>		
24	Tank Overflows		
25	Line Breaks		
26	Line Leaks	2,194	
27	Other		
28	<b>TOTAL LINE LOSS</b>	<b>2,194</b>	6.1%
29			
30	Note: Line 13 + Line 21 + Line 28 Must Equal Line 4		
31			
32	<b>WATER LOSS PERCENTAGE</b>		
33	Unaccounted-For Water (Line 28 divided by Line 4)		<b>6.1%</b>

# Laurel Water Dist. #2

## Flushing Reports

Month 11 Year 18

Day	Location	Size	P.S.I.	Chlorine Free-Total	Code	Time Start - End	Gallons
5	SUNNYSIDE LN	4"	1'↑			N 9:45-10:15	8,970
5	GREG LN	2"	8'↑			N 11:35-11:45	45,920
7	ROBINSON CR	4"	2'↑	1.5H		10:00-10:20	11,960
7	Davenport	2"	2'↑			10:20-10:30	1,640
27	Conest Ro	4"	1'↑	1.0H	B	12:50-1:00	2,990

Totals  **71,480 Gallon**

Operator 

Codes  
 Breaks - B     Complaint - C     New - N  
 Periodic - P    Interruption - I



**Fire Department - Water Usage Report Form**

KRS 278.170(3) 807 KAR 5:095 Section 9

*1 percent*

Any city, county, urban-county, charter county, fire protection district, or volunteer fire protection district ("User") may withdraw water from the utility's water distribution system for the purpose of fighting fires or training firefighters at no charge on the condition that it maintains estimates of the amount of water used for fire protection and training during the calendar month and reports the amount of this water usage to the utility no later than the 15th day of the following calendar month.

Any city, county, urban-county, charter county, fire protection district, or volunteer fire protection district that withdraws water from the utility's water distribution system for fire protection or training purposes and fails to submit the required report on water usage in a timely manner shall be assessed the cost of this water.

A non-reporting user's usage shall be presumed to be ~~0%~~ <sup>*0.1*</sup> percent of the utility's total water sales for the calendar month.

**Laurel County Fire Department** (name of Fire Department)

Month  
Year

<b>December</b>
<b>2018</b>

**Laurel County Water District #2** (name of Water System)

<b>unit conversion factor</b>	29.83
<b>coefficient value</b>	0.95

Date	Hydrant Location and/or Number	Reason Operated	Total Minutes Operated	Nozzle size (typically 2.5 or 4.5)	Pitot Pressure	GPM	Gallons Flowed	Estimated Flow if Pitot not used
12/31/2018								62,132

Signed: \_\_\_\_\_  
(fire department representative)

Date: \_\_\_\_\_

Total Gallons for Month **62,132**



# Monthly Excavation Break Report

**Laurel County Water District #2** (name of Water System)

**Ky 0630238** (PWSID)

Month   
Year

### Area Calculator

diameter in inches  
**Hole =**  sq. in.  
**Area =**

length (in) width (in)  
**Crack =**   sq. in.  
**Area =**

Insert the approximate dimensions of the hole or crack to determine the area of the break. Insert the area in the spreadsheet below.

Date	Excavation Break Location	Excavator	Minutes	Hole or Crack?	Area of hole or crack	Normal PSI	GPM	Gallons Lost During Break
10/8/2018	Gene Philpot/ Hwy 25	6" Main	60	Crack	6.750	100	1539	92,324
10/8/2018	719 Jackson Fariston Road	2" Main	2160	Crack	1.250	80	255	550,513
10/15/2018	128 Shannon Square	3/4" Service	2880	Crack	0.125	75	25	71,071
10/16/2018	Steeple chase Lane	4" Main	30	Crack	1.500	80	306	9,175
10/17/2018	496 Court Road	4" Main	30	Crack	1.000	100	228	6,839
10/16/2018	Steeplechase/Bakersfield	2" Main	30	Crack	1.500	80	306	9,175
10/19/2018	Bakersfield Lane/ Parkside	2" Main	30	Crack	0.500	75	99	2,961
10/23/2019	C&C Macine Shop	3/4" Service	2880	Crack	0.125	90	27	77,854
10/25/2018	304 Wildwood	2" Main	1440	Crack	0.750	70	143	205,983
10/25/2018	Meadow Lane	2" Main	30	Crack	0.125	90	27	811
11/21/2018	Campground Road	4" Main	60	Hole	12.560	100	3817	229,049
11/26/2018	Horse Creek Road	4" Main	120	Crack	1.250	80	255	30,584
11/27/2018	Court Road	4" Main	10	Hole	1.766	90	509	5,092
12/7/2018	468 Old Uniou Church Rd	3/4" Service	2880	Crack	0.250	90	54	155,709
12/7/2018	Behind C&C Machine Shop	3/4" Service	1440	Crack	0.188	100	43	61,549
12/12/2018	Five Star Paving	3/4" Service	4320	Crack	0.188	100	43	184,648
12/14/2018	Intersection Hwy 25&1629	6" Main	30	Crack	1.500	110	359	10,759
12/18/2018	1050 Slate Ridge Road	3/4" Service	1440	Crack	0.013	70	2	3,433
12/27/2018	Old Ubion Church Road	2" Main	15	Crack	3.313	80	675	10,131
12/31/2018	Hwy 25E & Greeting Card	4" Main	1440	Crack	0.750	100	171	246,197
							#REF!	#REF!
							#REF!	#REF!

**Total Gallons Lost Due to Excavation Breaks**

