

**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
EAST LOGAN WATER DISTRICT
TO
COMMISSION'S REQUEST FOR INFORMATION
DATED DECEMBER 18, 2018**

FILED JANUARY 14, 2019

COMMONWEALTH OF KENTUCKY
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INTO THE MEASURING,)
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CERTIFICATION OF RESPONSE OF
EAST LOGAN WATER DISTRICT TO
COMMISSION'S REQUEST FOR INFORMATION

This is to certify that I have supervised the preparation of East Logan Water District's Response to the Commission's Request for Information. The response submitted on behalf of East Logan Water District is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

DATE: 1-14-19



Linda Alexander, General Manager
East Logan Water District

East Logan Water District

CASE NO. 2018-00394

Response to Commission's Request for Information

Question No. 1

Responding Witness: Linda Alexander

- Question 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.

- Response 1. East Logan Water District (ELWD) uses the Monthly Flow Report produced by Logan Todd Regional Water Commission's (LTRWC) SCADA software (& is accessed daily, as needed) to obtain the total amount of water in gallons provided by wholesale supplier. Customer meters are read monthly. Water loss is calculated monthly by using the Consumption Analysis Report generated by the ELWD billing system of total gallons sold to all customers. The difference between water sold and water purchased after adjusting for flushing, fire department usage, line break loss and other usages as identified on Reporting Form is water loss.
- a. East Logan Water District uses the Monthly (Annual) Water Loss Report (Excel Workbook) Kentucky Rural Water Association (KRWA).
 - b. Exhibit 1 *sample* Monthly Water Loss Report (Excel Workbook sheet);
Exhibit 2 *sample* Monthly Flow Report
Exhibit 3 *sample* Consumption Analysis Report
Exhibit 4 *sample* Flushing Record Log

Exhibit 5 *sample* Fire Dept Water Usage Report

Exhibit 6 *sample* Leak / Flush Log

- c. Monthly Water Loss Report (Excel Workbook sheet) Source KRWA;**
- Monthly Flow Report Source LTRWC SCADA software;**
- Consumption Analysis Report Source United Systems billing software;**
- Flushing Record Log Source ELWD**
- Fire Dept Water Usage Report Source KRWA**
- Leak / Flush Log Source ELWD**

East Logan Water District

CASE NO. 2018-00394

Response to Commission's Request for Information

Question No. 2

Responding Witness: Linda Alexander

Question 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.

Response 2. East Logan Water District (ELWD) purchases and produces all of the water it sells. ELWD understands the Water Statistics (Ref Page: 30) of the Annual Report. All gallons are entered in thousands omitting 000's.

- 1. This is a section heading, "Water Produced, Purchased and Distributed"**
- 2. ELWD does not produce water therefore leaves blank.**
- 3. ELWD enters total gallons of water purchased**
- 4. This number is the total gallons of water the utility produced and purchased**
- 5. Intentional skipped number on Water Statistics (Ref Pg 30) print copy**
- 6. This is a section heading, "Water Sales: "**
- 7. Using billing system reports, ELWD enters Residential total annual usage**
- 8. Using billing system reports, ELWD enters Commercial total annual usage**
- 9. ELWD does not have any Industrial sales.**
- 10. ELWD does not have any Bulk Loading Stations.**
- 11. ELWD does not resale water to any wholesale customers**
- 12. Any water sold that cannot be categorized within Nos. 7 – 11, total gallons input here**
- 13. Total of all Water Sales (in gallons) calculated from all categories (Nos. 7-12)**
- 14. Intentional skipped number on Water Statistics (Ref Pg 30) print copy**
- 15. This is a section heading, "Other Water Used"**
- 16. ELWD does not have a Water Treatment Plant therefore this is left blank**

17. ELWD does not have a Wastewater Treatment Plant therefore this is left blank
18. ELWD routinely flushes to maintain safe drinking water standards. Flushing calculations and records are maintained. Total gallons used for flushing entered.
19. ELWD enters Fire Department usage from FD Water Usage Reports
20. Other usage not categorized elsewhere would be entered on this line
21. Total of Other Water Used (in gallons) calculated from all categories (Nos. 16-20)
22. Intentional skipped number on Water Statistics (Ref Pg 30) print copy
23. This is a section heading, "Water Loss: "
24. Gallons of water loss due to an annual total of any Tank Overflow entered (records are maintained, if applicable)
25. Gallons of water loss due to Known Line Breaks (caused/reported by utility, other utilities, customers, contractors, etc.) entered on this line (records are maintained, if applicable)
26. Gallons of water loss due to Known Line Leaks that have been located/repared and recorded on the Leak Log.
27. Gallons of water loss to "Other leaks" such as busted meter bottoms.
28. Total Line Loss (water in gallons) calculated from all categories (Nos. 24-27) and entered
29. Intentional skipped number on Water Statistics (Ref Pg 30) print copy
30. Intentional skipped number on Water Statistics (Ref Pg 30) print copy
31. Intentional skipped number on Water Statistics (Ref Pg 30) print copy
32. This is a section heading, "Water Loss Percentage"
33. The Water Loss Percentage is calculated based upon data entry of Line 28, "Total Line Loss" divided by Line 4, "Total Produced and Purchased"

East Logan Water District

CASE NO. 2018-00394

Response to Commission's Request for Information

Question No. 3

Responding Witness: Linda Alexander

Question 3. State any questions you have regarding how to use the updated Commission Form described and attached as Appendix A to this Order.

Response 3. East Logan Water District (ELWD) has no questions regarding the use of the updated Commission Form attached as Appendix A to the Order.

East Logan Water District

CASE NO. 2018-00394

Response to Commission's Request for Information

Question No. 4

Responding Witness: Linda Alexander

Question 4. State any suggestions or improvements you have for the updated Commission Form described and attached as Appendix A to this Order.

Response 4. East Logan Water District (ELWD) has no suggestions or improvements to offer for the updated Commission Form described and attached as Appendix A to the Order.

East Logan Water District

CASE NO. 2018-00394

Response to Commission's Request for Information

Question No. 5

Responding Witness: Linda Alexander

Question 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.

Response 5. East Logan Water District (ELWD) has no questions regarding how the information in the updated Commission Form described and attached as Appendix A to the Order is to be incorporated into annual reports.

East Logan Water District

CASE NO. 2018-00394

Response to Commission's Request for Information

Question No. 6

Responding Witness: Linda Alexander

Question 6. State any concerns you have regarding the use of the updated Commission Form described and attached as Appendix A to this Order.

Response 6. East Logan Water District (ELWD) has no concerns regarding the use of the updated Commission Form described and attached as Appendix A to the Order.

East Logan Water District

CASE NO. 2018-00394

Response to Commission's Request for Information

Question No. 7

Responding Witness: Linda Alexander

Question 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.

Response 7. East Logan Water District (ELWD) believes 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 the Order. ELWD believes it is a good business practice for all water utilities to track all sources of non-revenue water.

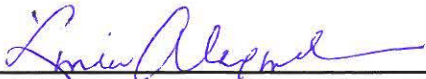
East Logan Water District

CASE NO. 2018-00394

Response to Commission's Request for Information

CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8, I certify that East Logan Water District'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 14, 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.



**Linda Alexander, General Manager
East Logan Water District**

Monthly Water Use Report

Exhibit 1

Water Utility: PWSID:

For the Month of: Year:

1 PRODUCTION COST PER THOUSAND (insert cost)
 2 PURCHASE COST PER THOUSAND (insert cost)

GALLONS

WATER PRODUCED or PURCHASED		
3	Water Produced	<input style="width: 100%;" type="text"/>
4	Water Purchased	<input style="width: 100%;" type="text"/>
5	TOTAL PRODUCED AND PURCHASED	0
6	TOTAL COST	

WATER SOLD		
7	Residential	<input style="width: 100%;" type="text"/>
8	Commercial	<input style="width: 100%;" type="text"/>
9	Industrial	<input style="width: 100%;" type="text"/>
10	Bulk Loading Stations	<input style="width: 100%;" type="text"/>
11	Wholesale	<input style="width: 100%;" type="text"/>
12	Other Sales (explain) _____	<input style="width: 100%;" type="text"/>
13	TOTAL WATER SOLD	0
14	TOTAL WATER NOT SOLD	0

BREAKDOWN OF WATER USAGE		
15	Water Treatment Plant	<input style="width: 100%;" type="text"/>
16	Wastewater Treatment Plant	<input style="width: 100%;" type="text"/>
17	System Flushing	0
18	Fire Department Usage	0
19	DBP Flushing DBP Maintenance	0
20	TOTAL USAGE	0
21	WATER LOSS PERCENTAGE FOR RATE PURPOSES	<input style="width: 50px;" type="text"/>

BREAKDOWN OF WATER LOST		
22	Tank Overflows (other than for DBP maintenance)	<input style="width: 100%;" type="text"/>
23	Excavation Breaks	0
24	Repaired Line Breaks	0
25	Unknown Loss	0
26	TOTAL WATER NOT SOLD OR USED	0
27	COST OF WATER NOT SOLD OR USED	

"UNKNOWN LOSS" FLOW RATE AND COST:		
28	"Unknown Loss"	0
29	% "Unknown Loss"	
30	(insert days of operation during month) Number of Days in Period	<input style="width: 100%;" type="text"/>
31	"Unknown Loss" per Day (Gallons per Day)	
32	"Unknown Loss" per Minute (GPM)	
33	"Unknown Loss" Cost for Month	

LOGAN TODD REGIONAL WATER COMMISSION - MONTHLY FLOW REPORT Exhibit 2

EAST LOGAN WATER DISTRICT LOGAN COUNTY December, 2018

Date	Plant Supply	Logan County Demand	Total ELWD Demand	ELWD Cemetary Road Flow	ELWD Dennis Flow Demand	ELWD HWY 79N Demand	ELWD South Union Demand	% of Total ELWD/Plant Supply	% of Total ELWD/Logan County Demand
12/1/2018	4,382,000	2,420,000	564,000	272,000	200,000	52,000	40,000	12.9%	23.3%
12/2/2018	4,482,000	2,449,000	677,000	350,000	238,000	35,000	54,000	15.1%	27.6%
12/3/2018	4,041,000	2,520,000	605,000	251,000	177,000	70,000	107,000	15.0%	24.0%
12/4/2018	4,178,000	2,308,000	572,000	285,000	114,000	107,000	66,000	13.7%	24.8%
12/5/2018	4,658,000	2,643,000	698,000	327,000	188,000	102,000	81,000	15.0%	26.4%
12/6/2018	4,259,000	2,660,000	659,000	273,000	200,000	99,000	87,000	15.5%	24.8%
12/7/2018	4,113,000	2,472,000	677,000	310,000	197,000	82,000	88,000	16.5%	27.4%
12/8/2018	4,177,000	2,309,000	605,000	287,000	225,000	63,000	30,000	14.5%	26.2%
12/9/2018	4,396,000	2,438,000	599,000	314,000	192,000	50,000	43,000	13.6%	24.6%
12/10/2018	4,756,000	2,406,000	656,000	224,000	198,000	128,000	106,000	13.8%	27.3%
12/11/2018	3,875,000	2,468,000	733,000	362,000	210,000	84,000	77,000	18.9%	29.7%
12/12/2018	4,709,000	2,617,000	755,000	351,000	197,000	94,000	113,000	16.0%	28.8%
12/13/2018	4,394,000	2,500,000	720,000	289,000	235,000	99,000	97,000	16.4%	28.8%
12/14/2018	4,210,000	2,297,000	671,000	292,000	164,000	105,000	110,000	15.9%	29.2%
12/15/2018	4,320,000	2,382,000	602,000	285,000	219,000	45,000	53,000	13.9%	25.3%
12/16/2018	3,941,000	2,298,000	648,000	334,000	206,000	35,000	73,000	16.4%	28.2%
12/17/2018	4,281,000	2,452,000	661,000	269,000	208,000	88,000	96,000	15.4%	27.0%
12/18/2018	4,417,000	2,507,000	715,000	309,000	228,000	84,000	94,000	16.2%	28.5%
12/19/2018	4,357,000	2,478,000	674,000	284,000	172,000	103,000	115,000	15.5%	27.2%
12/20/2018	4,005,000	2,344,000	712,000	274,000	235,000	114,000	89,000	17.8%	30.4%
12/21/2018	3,975,000	2,298,000	614,000	298,000	177,000	98,000	41,000	15.4%	26.7%
12/22/2018	4,584,000	2,551,000	743,000	353,000	243,000	90,000	57,000	16.2%	29.1%
12/23/2018	3,795,000	2,204,000	585,000	287,000	210,000	56,000	32,000	15.4%	26.5%
12/24/2018	3,896,000	2,304,000	622,000	314,000	223,000	54,000	31,000	16.0%	27.0%
12/25/2018	3,868,000	2,251,000	608,000	289,000	251,000	38,000	30,000	15.7%	27.0%
12/26/2018	4,700,000	2,369,000	625,000	323,000	186,000	82,000	34,000	13.3%	26.4%
12/27/2018	4,290,000	2,469,000	686,000	302,000	228,000	80,000	76,000	16.0%	27.8%
12/28/2018	4,236,000	2,395,000	598,000	272,000	204,000	95,000	27,000	14.1%	25.0%
12/29/2018	3,585,000	2,179,000	640,000	315,000	207,000	87,000	31,000	17.9%	29.4%
12/30/2018	4,214,000	2,184,000	558,000	286,000	194,000	48,000	30,000	13.2%	25.5%
12/31/2018	4,101,000	2,363,000	652,000	316,000	237,000	67,000	32,000	15.9%	27.6%
Total	131,194,999	74,535,000	20,134,000	9,297,000	6,363,000	2,434,000	2,040,000		
Minimum	3,585,000	2,179,000	558,000	224,000	114,000	35,000	27,000	12.9%	23.3%
Average	4,232,097	2,404,355	649,484	299,903	205,258	78,516	65,806	15.4%	27.0%
Maximum	4,756,000	2,660,000	755,000	362,000	251,000	128,000	115,000	18.9%	30.4%

Supply and Demand shown in gallons

1/2/2019 10:49:50 AM

East Logan Water District Consumption Analysis

Exhibit 3

Account Range	All Accounts	Limits	Increments
Service Type	All Service Types	999,999,999	999,999,999
Rate Code	All Rates		
Billing Cycle	1 Cycle 01		
Report Is For	Current Billing Information		
History Date Range	Not Applicable		
Print On Report	Number Of Services		
Report Type	Break Down Combine Consumption Brackets By Customer		
Customer Type	All Customer Types		
Use Reading Factor	<input checked="" type="checkbox"/>		
Include Inactive Services	<input type="checkbox"/>		
Produce an exception report of all accounts with a consumption over	100,000		
Date Selection For Report	Not Applicable		

	Usage Bracket	Number Of Services	Total Usage
Customer Type 01 Residential Breakdown	0 To 0	133	0
	1 To 999,999,999	2,926	10,911,200
Customer Type 01 Residential Totals		3,059	10,911,200
Customer Type 02 Commercial Breakdown	0 To 0	7	0
	1 To 999,999,999	26	2,345,100
Customer Type 02 Commercial Totals		33	2,345,100
Customer Type 03 Miscellaneous	0 To 0	3	0
Customer Type 03 Miscellaneous Totals		3	0
Customer Type 04 TAX EXEMPT	0 To 0	2	0
	1 To 999,999,999	6	142,500
Customer Type 04 TAX EXEMPT Totals		8	142,500
Grand Totals		3,103	13,398,800

FLUSHING OF LINES

EAST LOGAN WATER DISTRICT

Manager _____

Year _____

DATE	LOCATION OF HYDRANTS OR BLO-OFF	TEST RESULTS	SIZE	EST G.P.M.	TIME FLUSH	GALLONS FLUSHED	FLUSHED BY	VALVE SIZE

TOTAL ESTIMATED _____ gallons

Year - _____		East Logan Water – Water Distribution System Leak/Flush Log									
Date	Location of Leak	Reported by	Line Size	EST G.P.M.	Duration Of Leak	Repaired by	Remedy	Precautions Taken			Est. Loss (gallons)
								Samples	Flushed	BWA	