

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF THE)
WESTERN PULASKI COUNTY WATER)
DISTRICT FOR THE ISSUANCE OF A)
CERTIFICATION OF PUBLIC CONVENIENCE)
AND NECESSITY TO CONSTRUCT A WATER) CASE NO.
SYSTEM IMPROVEMENTS PROJECT AND AN) 2020-00331
ORDER AUTHORIZING THE ISSUANCE OF)
SECURITIES PURSUANT TO THE)
PROVISIONS OF KRS 278.020, KRS 278.300)
AND 807 KAR 5:001)

Response to Commission Staff's First Request for Information

Western Pulaski County Water District ("Western Pulaski District"), Counsel, hereby files its Response to the Commission's Staff's First Request for Information, dated November 20, 2020, as follows:

REQUEST 1: Refer to Western Pulaski District's 2019 Annual Report, page 57. Total Other Water Used, line 21, lists 158,885,000 gallons, which equates to 29.30 percent of the water purchased by Western Pulaski District.

REQUEST 1(a): Provide a detailed explanation of how the amounts were determined for each of the categories listed as Other Water Used.

WITNESS: Don Calder, Chairman, Western Pulaski County Water District.

RESPONSE 1(a): The amount of water listed in the Other Water Used category is achieved by adding together several subcategories in the Monthly Water Use Report. These groups are System Flushing, Fire Departments, and Other Usage:

System Flushing: This number is an estimate based upon the number of hydrants flushed and the number of leaks in any given month. For the calendar year 2019, the District had 252 leaks (52 Main Line Leaks and 200 Meter Leaks) and flushed approximately 260 hydrants. We estimated roughly 34,519 thousand gallons per flushing. These estimates vary monthly depending on the frequency of the line breaks and number of hydrants flushed. For example, if a line breaks and it is in the

northwestern area of the system, the District might leave a hydrant running for multiple days to flush the air out of the line.

Fire Departments: This number is an estimate based on the number of Fire Departments served in the District's system and the number of fires that occur.

Other Usage: This category is a catch all. It has been used to cover water tank renovations, tank disinfections, or new water line construction filling and flushing that have occurred in the calendar year 2019.

REQUEST 1(b): Provide copies of all documents relied upon to support the amounts of water usage for each of the categories listed as Other Water Used.

WITNESS: Don Calder, Chairman, Western Pulaski County Water District.

RESPONSE 1(b): See **Exhibit “A”** - Western Pulaski District's Monthly Water Used Report along with calculated master meter readings, water leak log and repairs.

REQUEST 1(c): Provide an explanation for the amount listed in the category Other-Other Usage as requested in the 2019 Annual Report.

WITNESS: Don Calder, Chairman, Western Pulaski County Water District.

RESPONSE 1(c): The Other Usage category is estimated based on subtracting the master meter reading from the previous master meter reading to come up with the amount of water that was used to fill and flush the new water lines, renovation and disinfection of existing tank, and busted lines during construction, all in 2019. The Other Usage amounts (441,000+/- Gallons) was based on the following:

January 2019: 2,500 Gallons recorded due to existing line being busted during construction of new water line for the Big Clifty Area Water Line Improvements project.

July 2019: 50,000 Gallons recorded for renovated tank disinfection as part of the Big Clifty Area Water Line Improvements project (Denham Knob Tank Renovation).

August 2019: 88,420 Gallons recorded to fill and flush a portion of 33,860 LF of new 8-inch water line for the Big Clifty Area Water Line Improvements project.

September 2019: 300,000 Gallons recorded to fill and flush a portion of 33,860 LF of new 8-inch water line for the Big Clifty Area Water Line Improvements project.

REQUEST 1(d): In the event that any of the usage is estimated, provide the basis for the amount of the estimate.

WITNESS: Don Calder, Chairman, Western Pulaski County Water District.

RESPONSE 1(d): The amount of water in two categories is estimated. These are System Flushing and Fire Departments:

System Flushing: The District has used a mathematical formula to estimate the amount of water flushed during a given period of time. This formula is listed as **Exhibit "A-1"**. For a standard flush hydrant, a two-and-a-half-inch opening is used to flush the system for water quality after a line break. The District follows the AWWA (American Water Works Association) of 2.5 fps (150 gpm on 2.5 inch opening) to scour the pipe followed by a lower rate of 1.75 fps (75 gpm on 2.5 inch opening) to clean up any disturbances (air or discoloration) in the water after the scour. This is accomplished as roughly four hours of a scour and an overnight flow at the lower rate. This comes out to roughly one hundred twenty-five thousand gallons over a twenty-four-hour period. This is for smaller flush hydrants; for the four and a half inch openings on the larger flush hydrants, 2.50 fps equals roughly 496 gpm and 125 gpm for 1.75 fps. For the larger flush hydrants this comes out to roughly two hundred and fifty thousand gallons over a twenty-four-hour period. For leaks, the line is flushed at 2.5 fps for roughly four hours and then the flushing is dialed back to 1.75 fps. This is to allow the line to settle down to allow the air trapped in the water to dissipate. Depending on the area of the county and the amount of elevation changes in the line, this process can take a six to eight hours or up to several days. Due to these evolving factors the amount of flushing listed each month varies based on the amount of line breaks, hydrants flushed and the areas in which the breaks occurred.

Fire Departments: Fire Department usage is estimated for historical amounts. The number 405,000 gallons was used because this appears to be close to or below the average for all fire districts combined. Pulaski County has five (5) fire departments that are served by the District, each fire department has its own personnel, and do not share an overall authority. This has led to massive problems of getting the fire departments to report usage. Occasionally, a volunteer fireman will notify the District of a fire the night before and indicate that they used "X" amount of tankers to put the fire out. The District than estimates based on the size of the tanker and records the gallons of usage. Due to these factors, the District decided to estimate the usage for the fire departments.

REQUEST 1(e): Provide a description of Western Pulaski District's past efforts to reduce system usage and describe Western Pulaski District's future plans to reduce water loss.

WITNESS: Don Calder, Chairman, Western Pulaski County Water District.

RESPONSE 1(e): Reference Response 4(a) & 4(b) from Case No. 2020-00119: Western Pulaski District is of the opinion that its water system loss/usage is due to leaks in system and customer meters that do not register properly. Western Pulaski District has been aggressively repairing leaks as they occur as indicated on the attached list of repairs for the year 2019 (see attached Exhibit "B"- Western Pulaski District's manager's handwritten log attached hereto). During 2019, Western Pulaski District repaired 252 leaks with most of the number of leaks on customer service lines and the larger leaks on main line breaks. In regard to meter replacement, since January 1, 2020, Western Pulaski District has replaced 600 meters that were over 10 years old with new radio read meters. Of these, 368 have been tested and our goal is to replace approximately 1,100 this year. Due to the impact of the coronavirus, we have put our meter replacement program on hold and plan to resume as soon as possible. In addition, we are working with our engineers in prioritizing areas for water line replacement. Western Pulaski District has not adopted a written plan to address water loss, however, we spend the majority of our time fixing leaks, replacing meters and identifying areas for line replacement. We see the need to have a written plan in place, so we are in the process of formulating a Water Loss Prevention and Leak Detection Program, and we plan on adopting it as soon as our Board approves it. The written plan will be an extension of the efforts that we have undertaken over the past years, that being leak repair, meter replacement and prioritizing areas of the water system that need to be upgraded.

REQUEST 2: Confirm that Western Pulaski District does not propose to increase its water service rates to its customers as a result of the proposed project.

WITNESS: Don Calder, Chairman, Western Pulaski County Water District.

RESPONSE 2: Western Pulaski District confirms that it does not propose to increase its water service rates to its customers as a result of the proposed project.

REQUEST 3: Provide Western Pulaski District's depreciation schedule for all of its assets for the period ending December 31, 2019.

WITNESS: Don Calder, Chairman, Western Pulaski County Water District.

RESPONSE 3: See Exhibit "C" - Western Pulaski District's Depreciation Expense attached hereto.

REQUEST 4: Provide a copy of a current amortization schedule for each of Western Pulaski District's outstanding bond issuances, promissory notes, and debt instruments.

WITNESS: Don Calder, Chairman, Western Pulaski County Water District.

RESPONSE 4: See **Exhibit "D"** - Western Pulaski District's Amortization Schedules attached hereto.

REQUEST 5: Provide a schedule in Excel spreadsheet format showing that Western Pulaski District met the debt service coverage requirements of its lenders in calendar years 2017, 2018, and 2019.

WITNESS: Don Calder, Chairman, Western Pulaski County Water District.

RESPONSE 5: See **Exhibit "E"** - Excel spreadsheet format showing that Western Pulaski District met the debt service coverage requirements of its lenders in calendar years 2017, 2018, and 2019 attached hereto.

REQUEST 6: Provide a schedule in Excel spreadsheet format showing that Western Pulaski District will meet the debt service coverage requirements of its lenders (existing and proposed long-term debt) for the three years following the completion of its proposed construction project. Include all calculations, assumptions (customer growth and increases in operating expenses), and workpapers used by Western Pulaski District in its response.

WITNESS: Don Calder, Chairman, Western Pulaski County Water District.

RESPONSE 6: See **Exhibit "F"** - Western Pulaski District's Excel spreadsheet format showing that Western Pulaski District will meet the debt service coverage requirements of its lenders (existing and proposed long-term debt) for the three years following the completion of its proposed construction project attached hereto.

REQUEST 7: Provide a schedule in Excel spreadsheet format showing Western Pulaski District's debt service coverage (existing and proposed long-term debt), including full recovery of its depreciation expense (existing plant and the completed project) for the three years following the completion of its proposed construction project. Include all calculations, assumptions (customer growth and increases in operating expenses), and workpapers used by Western Pulaski District in its response.

WITNESS: Don Calder, Chairman, Western Pulaski County Water District.

RESPONSE 7: See Exhibit "G" - Western Pulaski District's Excel spreadsheet format showing Western Pulaski District's debt service coverage (existing and proposed long-term debt), including full recovery of its depreciation expense (existing plant and the completed project) for the three years following the completion of its proposed construction project attached hereto.

REQUEST 8: Provide a copy of Western Pulaski District's general ledger for the calendar year ended December 31, 2019.

WITNESS: Don Calder, Chairman, Western Pulaski County Water District.

RESPONSE 8: See Exhibit "H" - Western Pulaski District's General Ledger attached hereto.

REQUEST 9: Provide Western Pulaski District's adjusted trial balance showing unaudited account balances, audit adjustments, and audited balances for the calendar year ended December 31, 2019.

WITNESS: Don Calder, Chairman, Western Pulaski County Water District.

RESPONSE 9: See Exhibit "I" - Western Pulaski District's adjusted trial balance showing unaudited account balances, audit adjustments, and audited balances for the calendar year ended December 31, 2019 attached hereto.

Certification of Responses to Commission Staff's First Request for Information

I hereby certify that I have provided the responses to the Commission Staff's First Request for Information. This information provided is the Response is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Don Calder
Don Calder, Chairman
Western Pulaski County Water District

The undersigned has prepared this Response as Counsel to and on behalf of the Western Pulaski County Water District, a governmental agency, and hereby certifies that this Response is true and accurate to the best of the undersign's knowledge, information and belief formed after a reasonable inquiry.

Respectfully Submitted:

Rubin & Hays

By



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CERTIFICATE OF SERVICE

The undersigned, in accordance with 807 KAR 5:001, Section 8, hereby certifies that Western Pulaski County Water District's electronic filing of the foregoing Response is a true and accurate copy of the same document being filed in paper medium; that the electronic filing was transmitted to the Kentucky Public Service Commission on December 2, 2020; that there are currently no parties that the Kentucky Public Service Commission has excused from participation by electronic means in this proceeding; and that this Response in paper medium will be delivered to the offices of the Kentucky Public Service Commission in Frankfort, Kentucky in accordance with the mandates set forth in the Commission's March 16, 2020 and March 24, 2020 Orders in Case No. 2020-00085 within 30 days of the lifting of the current state of emergency.



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District

EXHIBIT A

Monthly Water Use Report

Water Utility: **Western Pulaski Co. Water** PWSID: **1000363**

For the Month of: **January** Year: **2019**

1	PRODUCTION COST PER THOUSAND	\$0.00
2	PURCHASE COST PER THOUSAND	\$2.50

GALLONS

WATER PRODUCED or PURCHASED

3	Water Produced	\$0.00	0	0%
4	Water Purchased	\$107,083.64	42,833,454	100%
5	TOTAL PRODUCED AND PURCHASED			42,833,454
6	TOTAL COST			\$107,083.64

WATER SOLD

7	Residential	24,579,243
8	Commercial	1,394,970
9	Industrial	0
10	Bulk Loading Stations	0
11	Wholesale	0
12	Other Sales (explain)	0

13	TOTAL WATER SOLD	25,974,213	60.64%
14	TOTAL WATER NOT SOLD	16,859,241	39.36%

BREAKDOWN OF WATER USAGE

15	Water Treatment Plant	0
16	Wastewater Treatment Plant	0
17	System Flushing	125,000
18	Fire Department Usage	75,000
19	Other Usage (explain) contractors clay pipe	2,500

20	TOTAL USAGE	202,500
21	WATER LOSS PERCENTAGE FOR RATE PURPOSES	38.89%

BREAKDOWN OF WATER LOST

22	Tank Overflows	0
23	Excavation Breaks	0
24	Repaired Line Breaks	0
25	Unknown Loss	16,656,741

26	TOTAL WATER NOT SOLD OR USED	16,656,741
27	COST OF WATER NOT SOLD OR USED	\$41,641.85

"UNKNOWN LOSS" FLOW RATE AND COST:

28	"Unknown Loss"	16,656,741
29	% "Unknown Loss"	38.89%
30	Number of Days in Period	31
31	"Unknown Loss" per Day (Gallons per Day)	537,314
32	"Unknown Loss" per Minute (GPM)	373.13
33	"Unknown Loss" Cost for Month	\$41,641.85

 Kentucky Rural Water Association

January 2019

Somerset (W)	19,119,071	Hwy 1664 (W) 1,760,000
Oakview (W)	<u>3,838,000</u>	Sold RT. 24 <u>1,232,484</u>
Total	22,957,071	Loss = <u>527,516</u> (11.8 gpm)
-Nancy (W)	<u>15,166,000</u>	
	7,791,071	Hwy 196 @ 3,131,000
Sold RT 1.	2,867,774	Sold RT. 26 629,074
Sold RT 2.	<u>1,202,762</u>	Sold RT. 7 <u>1,201,019</u>
Loss =	3,720,535 (83.3 gpm)	Loss = 1,300,907 (29 gpm)
Dakhill (W)	6,164,955	North @ 7,011,895
Oakview (W)	<u>3,838,000</u>	- Hickory (W) 79,735
	2,326,955	6,933,160
Sold RT 10 =	<u>1,183,204</u>	Sold RT. 11. 1,344,242
Loss =	1,143,751 (25.62)	Sold RT. 12. 870,780
		Sold RT. 13. <u>798,680</u>
South (W)	10,537,531	Loss = 3,919,458 (87.8 gpm)
Slate branch	<u>4,487,000</u>	
	6,050,531	Nancy (W) 15,166,000
Sold RT 14.	1,765,360	- Faubush @ 2,739,000
Sold RT 16.	<u>2,734,660</u>	- 235 @ 2,275,000
Loss =	1,550,511 (34.7 gpm)	- 1664 @ 1,760,000
		- 196 @ 3,131,000
Slate branch	4,487,000	5,261,000
- Sold RT. 15	<u>3,381,615</u>	Sold RT. 22) 842,706
Loss =	1,105,385 (24.7 gpm)	Sold RT. 3) 1,892,303
		Sold RT. 6) <u>659,091</u>
Hwy 235 (W)	2,275,000	Loss = 1,966,906 (41.8 gpm)
Sold RT. 4.	<u>1,179,304</u>	
Loss =	1,095,696 (24.5 gpm)	

Faubush (W) 2,739,000
 Sold RT 5. 1,634,948
 Sold RT. 8 531,797
 Loss = 572,255
 (12.5 gpm)

Date

Jan 2019 Water Leaks

- 1-9-19 1. 6" main line leak at Sleepy Hollow
- 1-8-19 2. Roger Owen's $\frac{3}{4}$ service line leak
- 1-18-19 3. 218 Normandy Ct Service line leak
- 1-21-19 4. Tim Tarter meter 761 Busted (3510)
- 1-21-19 5. Wolf Creek marine 3" Main
- 1-22-19 6. 1" Service @ Shepola Rd.
- 1-28-19 7. 119 observation pt 1" service line leak
- 1-28-19 8. 676 hideaway dr busted bottom
- 1-31-19 9. DCWS Ridge Busted Bottom
- 10.

(~~8~~ (44) STOPPED METERS January)

2 Main
2 Ver
Live

Monthly Water Use Report

Water Utility: **Western Pulaski Co. Water** PWSID: **1000363**

For the Month of: **February** Year: **2019**

1 PRODUCTION COST PER THOUSAND	\$0.00
2 PURCHASE COST PER THOUSAND	\$2.50

GALLONS

WATER PRODUCED or PURCHASED

3 Water Produced	\$0.00	0	0%
4 Water Purchased	\$95,406.01	38,162,403	100%
TOTAL PRODUCED AND PURCHASED		38,162,403	
TOTAL COST		\$95,406.01	

WATER SOLD

7 Residential	26,934,168
8 Commercial	0
9 Industrial	0
10 Bulk Loading Stations	0
11 Wholesale	0
12 Other Sales (explain)	0

13	TOTAL WATER SOLD	26,934,168	70.58%
14	TOTAL WATER NOT SOLD	11,228,235	29.42%

BREAKDOWN OF WATER USAGE

15 Water Treatment Plant	0
16 Wastewater Treatment Plant	0
17 System Flushing	125,000
18 Fire Department Usage	50,000
19 Other Usage (explain)	0

20	TOTAL USAGE	175,000
21	WATER LOSS PERCENTAGE FOR RATE PURPOSES	28.96%

BREAKDOWN OF WATER LOST

22 Tank Overflows	0
23 Excavation Breaks	0
24 Repaired Line Breaks	0
25 Unknown Loss	11,053,235

26	TOTAL WATER NOT SOLD OR USED	11,053,235
27	COST OF WATER NOT SOLD OR USED	\$27,633.09

"UNKNOWN LOSS" FLOW RATE AND COST:

28	"Unknown Loss"	11,053,235
29	% "Unknown Loss"	28.96%
30	Number of Days in Period	28
31	"Unknown Loss" per Day (Gallons per Day)	394,758
32	"Unknown Loss" per Minute (GPM)	274.14
33	"Unknown Loss" Cost for Month	\$27,633.09



Kentucky Rural Water Association

Date	Feb 2019 Leaks
2-1-19	1. Daws Ridge Rd. busted meter bottom
2-4-19	2. 102 Koraha Ln. $\frac{3}{4}$ " Service
2-4-19	3. 5993 W. Hwy 80 $\frac{3}{4}$ " service
2-4-19	4. 305 patterson branch $\frac{3}{4}$ " service
1-8-19	5. Bottom of Clift Hill Rd. 1" service
2-9-19	6. 6" main @ Campbells Rd.
2-10-19	7. 6" main @ slate branch Rd.
2-11-19	8. 1" Service leak over hill Clift Rd.
2-14-19	9. 305 patterson br $\frac{3}{4}$ service line leak
2-14-19	10. Wilson + Roy shop $\frac{3}{4}$ service line leak
2-14-19	11. bridle brook 3" main line leak
2-14-19	12. bridle brook 3" main line leaking at 22 + slip couplin
2-19-19	13. Hickory Hill $\frac{3}{4}$ service line leak
2-21-19	14. 6" Main leak SW. 80 @ Sleepy hollow
2-25-19	15. 1600 Wtlo rd $\frac{3}{4}$ service line leak
2-25-19	16. 1166 oak hill Rd. Busted Bottom
2-25-19	17. 47 Highs Ct. Busted Bottom
	18.
	19.
	20.

February 2019

Somerset (M)	17,089,513	Hwy 1664 (W) 1,550,000
Oakview (W)	3,373,000	Sold RT. 24 1,478,636
TOTAL	20,462,513	LOSS = 71,364 (1.76 gpm)
-Nancy (W)	13,200,000	
	7,262,513	Hwy 196 (W) 2,566,000
Sold RT. 1.	2,910,333	Sold RT. 26. 679,631
Sold RT. 2.	1,212,631	Sold RT. 7 1,220,624
LOSS =	3,139,549 (7.8 gpm)	LOSS = 665,745 (16.5 gpm)
OAK Hill (W)	5,535,441	North (W) 5,867,727
-Oakview (W)	3,373,000	-Hickory (W) 22,247
	2,162,441	5,845,480
Sold RT. 20.	1,185,985	Sold RT. 11. 1,365,256
LOSS =	9,716,456 (24.2 gpm)	Sold RT. 13. 802,170
South (W)	9,669,972	Sold RT. 12. 870,290
-Slate Br. (W)	4,346,000	LOSS = 2,807,764 (69.6 gpm)
	5,323,972	Nancy (W) 13,200,000
Sold RT. 14.	1,780,269	-Faubush (W) 2,238,600
Sold RT. 16.	2,766,416	-235 (W) 2,114,000
LOSS =	777,293 (19.2 gpm)	-1664 (W) 1,550,000
		-196 (W) 2,566,000
Slate Br. (W)	4,346,000	4,731,400
Sold RT. 15.	3,505,587	Sold RT. 22 881,491
LOSS =	840,413 (20.8 gpm)	Sold RT. 3 2,028,055
		Sold RT. 6 708,349
Hwy 235 (W)	2,714,000	LOSS = 7,113,505 (27.6 gpm)
-Sold RT. 4.	1,225,897	
LOSS =	888,103 (22 gpm)	

Faubush (W) 2,238,600

Sold RT. 5. 1,521,556

Sold RT. 8. 768,188

~~RT. 11~~ - 51,144

+Hickory (W) 22,247

- 28,897

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Monthly Water Use Report

Water Utility:

Western Pulaski Co. Water

PWSID: **1000363**

For the Month of:

March

Year: **2019**

1 PRODUCTION COST PER THOUSAND
2 PURCHASE COST PER THOUSAND

\$0.00

\$2.50

GALLONS

WATER PRODUCED or PURCHASED

3 Water Produced	\$0.00	0	0%
4 Water Purchased	\$106,144.65	42,457,859	100%
TOTAL PRODUCED AND PURCHASED		42,457,859	
6	TOTAL COST	\$106,144.65	

WATER SOLD

7 Residential	21,861,479
8 Commercial	1,624,590
9 Industrial	0
10 Bulk Loading Stations	0
11 Wholesale	0
12 Other Sales (explain)	0

13	TOTAL WATER SOLD	23,486,069	55.32%
14	TOTAL WATER NOT SOLD	18,971,790	44.68%

BREAKDOWN OF WATER USAGE

15 Water Treatment Plant	0
16 Wastewater Treatment Plant	0
17 System Flushing	
18 Fire Department Usage	
19 Other Usage (explain)	Fill New Line Ringgold Rd./Flush

20	TOTAL USAGE	0
21	WATER LOSS PERCENTAGE FOR RATE PURPOSES	44.68%

BREAKDOWN OF WATER LOST

22 Tank Overflows	0
23 Excavation Breaks	
24 Repaired Line Breaks	
25 Unknown Loss	18,971,790

26	TOTAL WATER NOT SOLD OR USED	18,971,790
27	COST OF WATER NOT SOLD OR USED	\$47,429.48

"UNKNOWN LOSS" FLOW RATE AND COST:

28	"Unknown Loss"	18,971,790
29	% "Unknown Loss"	44.68%
30	Number of Days in Period	31
31	"Unknown Loss" per Day (Gallons per Day)	611,993
32	"Unknown Loss" per Minute (GPM)	425.00
33	"Unknown Loss" Cost for Month	\$47,429.48



Kentucky Rural Water Association

MARCH 2019

Somerset (W)	19,326,937	Hwy 196 (W) 1,986,000
Oakview (W)	3,876,000	Sold 24 969,318
Total	23,202,937	Loss = 1,016,682 (22.7 gpm)
Nancy (W)	15,178,000	
	8,024,937	Hwy 196 @ 2,886,000
Sold RT 1.	8,838,731	Sold RT. 26 590,563
Sold RT. 2	1,298,770	Sold RT. 7 908,273
Loss =	3,897,436 (87.0 gpm)	Loss = 1,387,164 (31 gpm)
Yakhill (W)	6,161,492	North (W) 6,446,716
Oakview (W)	3,876,000	Hickory (W) 194
	2,285,492	6,446,522
Sold RT. 20	1,073,309	Sold 11. 1,373,835
Loss	1,212,389 (27 gpm)	Sold 12. 887,920 Faubush (W) 2,797,500
		Sold 13. 807,180 Sold RT. 5 1,327,445
South (W)	10,532,713	Loss = 3,377,584 Sold RT. 8 375,469
Late branch (W)	4,506,000	(75.6 gpm) Loss = 1,194,586
	6,016,713	Nancy (W) 15,178,000 (26.7 gpm)
Sold RT 14	1,697,612	- 196 (W) 2,886,000
Sold RT 16	2,493,420	- 196 (W) 1,986,000
Loss =	1,825,681 (40.8 gpm)	- 235 (W) 2,461,000
		7,845,000
Late branch (W)	4,506,000	Faubush (W) 2,797,500
Sold RT. 15	2,861,361	5,047,500
Loss =	1,644,639 (36.8 gpm)	- RT. 22. 806,618 (424.7 gpm)
		- RT. 3. 1,771,879
RT. 35 (W)	2,461,000	- RT. 6. 594,880 Total
Sold RT 4	1,889,063	Loss = 1,874,123 (41.9 gpm)
Loss	1,571,937 (35.2 gpm)	

Mar 2019 Water Leaks

3-7-19	1.	8" Main leak (Bad)
3-11-19	2.	56 Summerwind $\frac{3}{4}$ " Service line
3-11-19	3.	TODD rd 3" main line
3-19-19	4.	200 mooreland dr Service line leak
3-20-19	5.	3009 Simpson dr $\frac{3}{4}$ Service line leak
3-20-19	6.	3011 Simpson dr 1" Service line leak
3-20-19	7.	1901 Tigers way $\frac{3}{4}$ service line leak
3-21-19	8.	1825 Wolf creek rd 1" Service line leak
3-22-19	9.	2329 Ringgold rd 4" Main line leak
3-22-19	10.	Cedar crest regulator pit 2" main
3-22-19	81	Todd blvd $\frac{3}{4}$ service line leak
3-24-19		168 Lakebreeze busted meter bottom
3-29-19		Calvary baptist church $\frac{3}{4}$ service line leak

Monthly Water Use Report

Water Utility: **Western Pulaski Co. Water** PWSID: **1000363**

For the Month of: **April** Year: **2019**

1	PRODUCTION COST PER THOUSAND	\$0.00
2	PURCHASE COST PER THOUSAND	\$2.50

GALLONS

WATER PRODUCED or PURCHASED

3	Water Produced	\$0.00	0	0%
4	Water Purchased	\$105,726.13	42,290,450	100%
5	TOTAL PRODUCED AND PURCHASED		42,290,450	
6	TOTAL COST		\$105,726.13	

WATER SOLD

7	Residential	25,420,073
8	Commercial	2,316,369
9	Industrial	0
10	Bulk Loading Stations	0
11	Wholesale	0
12	Other Sales (explain)	0

13	TOTAL WATER SOLD	27,736,442	65.59%
14	TOTAL WATER NOT SOLD	14,554,008	34.41%

BREAKDOWN OF WATER USAGE

15	Water Treatment Plant	0
16	Wastewater Treatment Plant	0
17	System Flushing	120,000
18	Fire Department Usage	
19	Other Usage (explain)	

20	TOTAL USAGE	120,000
21	WATER LOSS PERCENTAGE FOR RATE PURPOSES	34.13%

BREAKDOWN OF WATER LOST

22	Tank Overflows	0
23	Excavation Breaks	
24	Repaired Line Breaks	
25	Unknown Loss	14,434,008

26	TOTAL WATER NOT SOLD OR USED	14,434,008
27	COST OF WATER NOT SOLD OR USED	\$36,085.02

"UNKNOWN LOSS" FLOW RATE AND COST:

28	"Unknown Loss"	14,434,008
29	% "Unknown Loss"	34.13%
30	Number of Days in Period	30
31	"Unknown Loss" per Day (Gallons per Day)	481,134
32	"Unknown Loss" per Minute (GPM)	334.12
33	"Unknown Loss" Cost for Month	\$36,085.02



Kentucky Rural Water Association

April 2019 LEAKS

- 4-1-19 1) 6x4 Tapping sleeve leaking Hwy 1248 14-28) 496 Ferry Rd - Bust
 4-2-19 2) Royce Shop $\frac{3}{4}$ " Service leak 14-29) 171 Arlen Dr $\frac{3}{4}$ service line
 4-2-19 3) W. 80 Dance hall 1" service leak 14-30) Circle pt Busted Bottom
 1-3-19 4) 828 Hwy 235 $\frac{3}{4}$ service line leak 14-31) 8" Ringsold Rd (new line
 1-4-19 5) Enchanted dr $\frac{1}{2}$ " service line leak 32)
 1-4-19 6) Shady grove rd 3" main line leak 33)
 1-8-19 7) Danielle Ln 1" service line leak
 1-10-19 8) 1042 Rechner Rd ~~███████████~~ service line leak
 1-10-19 9) 299 Wilson Rd service line leak
 1-14-19 10) Valley rd 3" main line leak
 1-12-19 11) 155 Danielle Ln. 1" service leak
 1-15-19 12) 1" Service line in (3 places) Lee's Ford
 1-16-19 13) Boat place on 80 Across from 3345 $\frac{3}{4}$ service line leak
 1-16-19 14) 171 Enchanted dr $\frac{3}{4}$ service line leak
 1-16-19 15) 510 Oakland dr 3" main line leak
 1-16-19 16) 1441 Hwy 1674 $\frac{3}{4}$ service line leak
 1-17-19 17) 3905 Hickory Hill dr $\frac{3}{4}$ service line leak
 1-17-19 18) slate branch spars @ END 3" Main
 1-17-19 19) Busted Bottom Goves Ln.
 1-18-19 20) 3714 Hickory Hill Busted Bottom
 1-18-19 21) ~~███████████~~ Oakwood ~~②~~ Busted Bottom
 1-22-19 22) 150 Crestwood $\frac{3}{4}$ " Service
 1-22-19 23) Country pt. Ln. $\frac{3}{4}$ " Service
 1-22-19 24) 980 slate branch Busted meter Bottom
 1-23-19 25) Robin Dr. 3" Main
 1-24-19 26) Fish - N - ski Busted Bottom
 1-24-19 27) 115 Hddrn Ct. Busted Bottom

April 2019

Jameson (W)	19056706	1664 (W) 225,500	Faubush @ 2,972,000
JK View (W)	3905000	Sold 24 1,758,547	RT. 5 1,535,348
Total =	22,961,706	Loss = 496,453 (11.5 gpm)	RT. 8 438,389
Nancy (W)	15,326,000		Loss = 998,263
	7,635,706	Highway 196 @ 2,932,000	(23.1 gpm)
Old RT. 1	3,153,669	Sold 26 667,350	
Old RT. 2	1,624,199	Sold 7 1,268,839	
Loss =	2,857,838 (6.6 gpm)	Loss = 995,811 (23 gpm)	(336.9 gpm)
JK Hill (W)	6035103	North (W) 6662,960	Total
JK View (W)	3905000	Sold 11 1,414,170	
	2,130,103	Sold 12 949,900	
Old RT. 20	1,116,450	Sold 13 837,100	
Loss =	1,013,653 (23.4 gpm)	Loss = 3,461,790 (80 gpm)	
WTH (W)	10,535,679	Nancy (W) 15,326,000	
Site branch (W)	4,559,000	- 235 (W) 2,033,000	
	5,976,679	- 1664 (W) 2,255,000	
d 14	1,650,920	- 196 (W) 2,932,000	
d 16	2,744,270	8,106,000	
Loss =	1,581,489 (36.6 gpm)	Faubush @ 2,972,000	
		5,134,000	
Site branch (W)	4,559,000	RT. 22 803,512	
d 15	3,626,739	RT. 3 2,094,684	
SS =	932,261 (21.5 gpm)	RT. 6 663,920	
		Loss = 1,571,884 (36.4 gpm)	
(W)	2033000		
RT. 4	1,365,948		
Loss =	667,052 (15.4 gpm)		

Monthly Water Use Report

Water Utility: **Western Pulaski Co. Water** PWSID: **1000363**

For the Month of: **May** Year: **2019**

1 PRODUCTION COST PER THOUSAND	\$0.00
2 PURCHASE COST PER THOUSAND	\$2.50

GALLONS

WATER PRODUCED or PURCHASED

3 Water Produced	\$0.00	0	0%
4 Water Purchased	\$111,299.23	44,519,692	100%
5 TOTAL PRODUCED AND PURCHASED		44,519,692	
6 TOTAL COST	\$111,299.23		

WATER SOLD

7 Residential	27,432,518
8 Commercial	3,456,233
9 Industrial	0
10 Bulk Loading Stations	0
11 Wholesale	0
12 Other Sales (explain)	0

13	TOTAL WATER SOLD	30,888,751	69.38%
14	TOTAL WATER NOT SOLD	13,630,941	30.62%

BREAKDOWN OF WATER USAGE

15 Water Treatment Plant	0
16 Wastewater Treatment Plant	0
17 System Flushing	200,000
18 Fire Department Usage	50,000
19 Other Usage (explain)	0

20	TOTAL USAGE	250,000
21	WATER LOSS PERCENTAGE FOR RATE PURPOSES	30.06%

BREAKDOWN OF WATER LOST

22 Tank Overflows	0
23 Excavation Breaks	0
24 Repaired Line Breaks	0
25 Unknown Loss	13,380,941

26	TOTAL WATER NOT SOLD OR USED	13,380,941
27	COST OF WATER NOT SOLD OR USED	\$33,452.35

"UNKNOWN LOSS" FLOW RATE AND COST:

28	"Unknown Loss"	13,380,941
29	% "Unknown Loss"	30.06%
30	Number of Days in Period	31
31	"Unknown Loss" per Day (Gallons per Day)	431,643
32	"Unknown Loss" per Minute (GPM)	299.75
33	"Unknown Loss" Cost for Month	\$33,452.35



May 2019 Water Leaks

5-1-19	1.	12 Deck Dr. Busted Bottom	29-171 Enchanted dr 3/4 service line leak
5-1-19	2.	93 Kolsans ct 3/4 service line leak	
5-1-19	3.	6141 W Hwy 80 3/4 service line leak	
5-1-19	4.	3160 Hwy 2993 busted meter bottom	
5-2-19	5.	505 Nature's Point 3/4 Service line leak	
5-2-19	6.	1039 Hwy 3091 3/4 Service line leak	
5-7-19	7.	Charlie Beasley loop 3/4 Service line leak	
5-10-19	8.	Buck Trail 3" main line leak	
5-11-19	9.	260 Circle Pt. Busted Bottom	
5-14-19	10.	7 - oaks rd 3/4 service line leak	
5-16-19	11.	204 Lynhwood Dr Busted meter	
5-16-19	12.	Lookout circle 3/4 service line leak	
5-16-19	13.	1014 South Fork dr 3/4 service line leak	
5-16-19	14.	6211 Pritchard dr 3/4 service line leak	
5-17-19	15.	5893 W. 80 3/4 service line leak	
5-17-19	16.	102 Smetta Ave 3/4 service line leak	
5-20-19	17.	1905 Rollin dr 3/4 service line leak	
5-20-19	18.	1908 Rollin dr 3/4 service line leak	
5-21-19	19.	66 Isle St Busted Bottom	
5-22-19	20.	Chequers Dairy 6" main line	
5-23-19	21.	1903 Tigers Way 3/4" service	
5-24-19	22.	2623 Lenetawn rd 1" service line leak	
5-28-19	23.	85 Hwy 235 3/4 Service line leak	
5-28-19	24.	Kates rd 3/4 Service line leak	
5-28-19	25.	Robin dr 3" main line leak	
5-31-19	26.	6484 ZW 80 Busted meter.	
5-19	27.	175 Muse Ln 1" Service line leak	
5-19	28.	860 Old Columbia rd 3/4 Service line leak	

MAY 2019

Somerset @	21,793,697	1664 @ 2,445,000
AK View @	4,405,000	Sold RT 24, 1,765,386
TOTAL	26,198,697	LOSS = 679,614 (15.2 gpm)
NANCY @	18,017,000	
	8,181,697	166 @ 3,925,000
old RT. 1 -	3,484,697	RT 26, 850,410
old RT. 2 -	1,691,070	RT. 7 1,469,335
LOSS =	3,005,930 (67.3 gpm)	LOSS = 1,605,255 (35.9 gpm)
AK Hill @	6,342,941	North @ 4,356,392
AK View @ -	4,405,000	Hickory @ 753,990
TOTAL	1,937,941	3,602,402 ; Somerset Meter stopped
old RT. 20	1,549,380	RT. 11 1,518,354 on low flow
LOSS =	388,561 (8.7 gpm)	RT. 12 1,217,650
south @	12,026,660	RT. 13 959,811
late branch @	5,022,000	LOSS = -93,413 ?
TOTAL	7,004,660	Nancy @ 18,017,000
old RT. 14	1,894,106	- 196 @ 3,925,000
old RT. 16	3,047,550	- 1664 @ 2,445,000
LOSS =	2,063,004 (46.2 gpm)	- 235 @ 2,050,000
		4,597,000
late branch @	5,022,000	Faubush @ 3,791,400
old RT. 15	3,708,045	
LOSS =	1,313,955 (29.4 gpm)	5,805,600
.35 @	8,050,000	RT. 22 852,183
old RT. 4	1,265,224	RT. 3 2,030,660
LOSS =	784,776 (17.5 gpm)	RT. 6 834,666
		LOSS = 2,088,091 (46.7 gpm)

Monthly Water Use Report

Water Utility: **Western Pulaski Co. Water** PWSID: **1000363**

For the Month of: **June** Year: **2019**

1 PRODUCTION COST PER THOUSAND	\$0.00
2 PURCHASE COST PER THOUSAND	\$2.50

GALLONS

WATER PRODUCED or PURCHASED

3 Water Produced	\$0.00	0	0%
4 Water Purchased	\$98,812.72	39,525,088	100%
TOTAL PRODUCED AND PURCHASED		39,525,088	
TOTAL COST		\$98,812.72	

WATER SOLD

7 Residential	30,885,993
8 Commercial	4,573,930
9 Industrial	0
10 Bulk Loading Stations	0
11 Wholesale	0
12 Other Sales (explain)	0

13	TOTAL WATER SOLD	35,459,923	89.71%
14	TOTAL WATER NOT SOLD	4,065,165	10.29%

BREAKDOWN OF WATER USAGE

15 Water Treatment Plant	0
16 Wastewater Treatment Plant	0
17 System Flushing	125,000
18 Fire Department Usage	25,000
19 Other Usage (explain)	

20	TOTAL USAGE	150,000
21	WATER LOSS PERCENTAGE FOR RATE PURPOSES	9.91%

BREAKDOWN OF WATER LOST

22 Tank Overflows	0
23 Excavation Breaks	0
24 Repaired Line Breaks	0
25 Unknown Loss	3,915,165

26	TOTAL WATER NOT SOLD OR USED	3,915,165
27	COST OF WATER NOT SOLD OR USED	\$9,787.91

"UNKNOWN LOSS" FLOW RATE AND COST:

28	"Unknown Loss"	3,915,165
29	% "Unknown Loss"	9.91%
30	Number of Days in Period	30
31	"Unknown Loss" per Day (Gallons per Day)	130,506
32	"Unknown Loss" per Minute (GPM)	90.63
33	"Unknown Loss" Cost for Month	\$9,787.91



Kentucky Rural Water Association

June 2019 Water Leaks

- 6-3-19 1- 277 bates rd $\frac{3}{4}$ service line leak
- 6-3-19 2- 219 oakview dr $\frac{3}{4}$ Service line leak
- 6-3-19 3- 205 Richwood dr $\frac{3}{4}$ service line Leak
- 6-4-19 4- Fish N Ski $\frac{3}{4}$ service line leak
- 6-6-19 5- 1447 Oakhill Rd. Service leak
- 6-8-19 6- 6" Main Leak old millspring (Larry Shepperds farm)
- 6-11-19 7- 8" main leak Hickory Nut Rd. Bottom of Hill (contractors)
- 6-12-19 8- Woodland dr $\frac{3}{4}$ service line leak
- 6-14-19 9- 3230 Ard Ridge Rd. busted MT Bottom
- 6-14-19 10- Rutherford Hill Busted meter bottom
- 6-17-19 11- Busted meter bottom Gower Ln.
- 6-18-19 12- 6" Main slate branch @ oakhill
- 6-19-19 13- 88 Jody Way $\frac{3}{4}$ Service line leak
- 6-19-19 14- 6450 Hwy 761 $\frac{3}{4}$ service line leak
- 6-21-19 15- 914 By pass 6" main
- 6-21-19 16- 48 gower Ln Busted bottom
- 6-21-19 17- wild wood Dr.
- 6-22-19 18- 512 Water Clifft DR. Busted bottom
- 6-25-19 19- 512 Clifft Rd. $\frac{3}{4}$ " Service leak
- 6-26-19 20- 810 Coffey Rd $\frac{3}{4}$ " Service leak
- 21
- 22
- 23
- 24
- 25

Monthly Water Use Report

Water Utility: **Western Pulaski Co. Water** PWSID: **1000363**

For the Month of: **July** Year: **2019**

1	PRODUCTION COST PER THOUSAND	\$0.00
2	PURCHASE COST PER THOUSAND	\$2.50

GALLONS

WATER PRODUCED or PURCHASED

3	Water Produced	\$0.00	0	0%
4	Water Purchased	\$135,588.40	54,235,359	100%
5	TOTAL PRODUCED AND PURCHASED		54,235,359	
6	TOTAL COST		\$135,588.40	

WATER SOLD

7	Residential	28,353,670
8	Commercial	6,245,510
9	Industrial	0
10	Bulk Loading Stations	0
11	Wholesale	0
12	Other Sales (explain)	0

13	TOTAL WATER SOLD	34,599,180	63.79%
14	TOTAL WATER NOT SOLD	19,636,179	36.21%

BREAKDOWN OF WATER USAGE

15	Water Treatment Plant	0
16	Wastewater Treatment Plant	0
17	System Flushing	200,000
18	Fire Department Usage	60,000
19	Other Usage (explain)	New tank fill and disinfect

20	TOTAL USAGE	310,000
21	WATER LOSS PERCENTAGE FOR RATE PURPOSES	35.63%

BREAKDOWN OF WATER LOST

22	Tank Overflows	0
23	Excavation Breaks	0
24	Repaired Line Breaks	0
25	Unknown Loss	19,326,179

26	TOTAL WATER NOT SOLD OR USED	19,326,179
27	COST OF WATER NOT SOLD OR USED	\$48,315.45

"UNKNOWN LOSS" FLOW RATE AND COST:

28	"Unknown Loss"	19,326,179
29	% "Unknown Loss"	35.63%
30	Number of Days in Period	31
31	"Unknown Loss" per Day (Gallons per Day)	623,425
32	"Unknown Loss" per Minute (GPM)	432.93
33	"Unknown Loss" Cost for Month	\$48,315.45



July 2019 Water Leaks

7-1-19	1.	Luke Stevenson 1ts $\frac{3}{4}$ " Service line	
7-1-19	2.	1775 patterson branch $\frac{3}{4}$ " service line	
7-1-19	3.	200 moreland Dr. $\frac{3}{4}$ " Service line	
7-2-19	4.	Todd rd 3" main line leak	
7-2-19	5.	87 Summer Wind dr busted meter bottom	
7-3-19	6.	Sleepy Hollow $\frac{3}{4}$ " service line	
7-4-19	7.	w.hwy 80 at H.E. blonds storage buildings busted meter bottom	
7-8-19	8.	2904 Richardson rd $\frac{3}{4}$ Service line leak	
7-8-19	9.	109 Evert Ln. Busted Bottom	29. 517 natures point $\frac{3}{4}$ service line leak
7-9-19	10.	220 Redmond Rd. Busted Bottom	30. 1901 Abbons way $\frac{3}{4}$ service line leak
7-9-19	11.	Lakefield Dr. 1" service leak	31. 107 Deck DR. Apt A Service
7-9-19	12.	Birchwood Dr. $\frac{3}{4}$ " service leak	7-29-19 32. Brian's DR Service leak
7-9-19	13.	8882 Hwy 761 $\frac{3}{4}$ " service leak	7-30-19 33. McKee Rd Service Leak
7-9-19	14.	chickasaw rd 3" main line leak	34. BLassinger circle $\frac{3}{4}$ Service leak
7-12-19	15.	15919 w hwy 80 6" main line leak	35. Hcl66 box 1145 $\frac{3}{4}$ service leak
7-12-19	16.	307 buckeye dr $\frac{3}{4}$ service line leak	36. Bates rd $\frac{3}{4}$ service line leaked
7-13-19	17.	49 Edge water pt $\frac{3}{4}$ service leak	
7-14-19	18.	314 Hwy 235 Busted Bottom	
7-15-19	19.	3904 Rollin dr $\frac{3}{4}$ service line leak	
7-15-19	20.	3830 hickory Hill $\frac{3}{4}$ service line leak	
7-15-19	21.	505 bronchwood dr $\frac{3}{4}$ service line leak	
7-15-19	22.	white oak dr $\frac{3}{4}$ service line leak	
7-16-19	23.	Hwy 761 4" Main state hit line	
7-17-19	24.	Patterson branch leak 4" Main	
7-18-19	25.	Hwy 761 Leak 3" Main	
7-19-19	26.	1550 Bridge Hollow Rd. busted MT bottom	
7-24-19	27.	960 New hope rd $\frac{3}{4}$ service line leak	
7-24-19	28.	212 Woodline dr $\frac{3}{4}$ service line leak	

Monthly Water Use Report

Water Utility: **Western Pulaski Co. Water** PWSID: **1000363**

For the Month of: **August** Year: **2019**

1	PRODUCTION COST PER THOUSAND	\$0.00
2	PURCHASE COST PER THOUSAND	\$2.50

GALLONS

WATER PRODUCED or PURCHASED

3	Water Produced	\$0.00	0	0%
4	Water Purchased	\$125,774.66	50,309,863	100%
TOTAL PRODUCED AND PURCHASED			50,309,863	
6	TOTAL COST	\$125,774.66		

WATER SOLD

7	Residential	32,493,312		
8	Commercial	7,103,822		
9	Industrial	0		
10	Bulk Loading Stations	0		
11	Wholesale	0		
12	Other Sales (explain)	0		
13		TOTAL WATER SOLD	39,597,134	78.71%
14		TOTAL WATER NOT SOLD	10,712,729	21.29%

BREAKDOWN OF WATER USAGE

15	Water Treatment Plant	0	
16	Wastewater Treatment Plant	0	
17	System Flushing	150,000	
18	Fire Department Usage	30,000	
19	Other Usage (explain) Filled new 8" line 33860ft.	88,420	

TOTAL USAGE 268,420

WATER LOSS PERCENTAGE FOR RATE PURPOSES **20.76%**

BREAKDOWN OF WATER LOST

22	Tank Overflows	60,000	
23	Excavation Breaks	0	
24	Repaired Line Breaks	0	
25	Unknown Loss	10,384,309	20.64%

TOTAL WATER NOT SOLD OR USED 10,444,309

COST OF WATER NOT SOLD OR USED \$26,110.77

"UNKNOWN LOSS" FLOW RATE AND COST:

28	"Unknown Loss"	10,384,309
29	% "Unknown Loss"	20.64%
30	Number of Days in Period	31
31	"Unknown Loss" per Day (Gallons per Day)	334,978
32	"Unknown Loss" per Minute (GPM)	232.62
33	"Unknown Loss" Cost for Month	\$25,960.77



Kentucky Rural Water Association

August 2019 LEAKS

			8-22
8-1-19	1.	1298 State br rd 6" main line leak	10"
8-1-19	2.	8611 W. Hwy 80 Service line leak $\frac{3}{4}$ "	10" 8-23
8-1-19	3.	Prather Rd @ Turpen $\frac{3}{4}$ " Service	main/leak under bridge 8-27-19
8-2-19	4.	141 Park Forest $\frac{3}{4}$ service line leak	$\frac{3}{4}$ " Service @ science lab 8-27
8-5-19	5.	intersection of Romford & overlock 1" service line	3/4" Service Line 8-27-19
8-6-19	6.	Berry Turpen $\frac{3}{4}$ Service line leak	6" Main Oakhill Rd Grand canyon Busted
8-7-19	7.	Lakepoite rd 3" main line leak	1135 Patterson branch Busted
8-7-19	8.	End of Ard ridge busted bottom	6" Main Clifty Rd @ 12' Clifty hill
8-9-19	9.	Heartland dr $\frac{3}{4}$ Service line leak	1" Service line in <u>4</u> spots
8-9-19	10.	North bass circle 2-1" Service line leaks	$\frac{3}{4}$ " Service line Rollin dr
8-11-19	11.	W.hwy 80 At Pumpstation 8" main line leak	1" Service Leak Clifty hill
8-12-19	12.	Piney Grove Rd. 4" main line leak	3" Again pleasant pt. Rd 8-30-19
8-13-19	13.	3812 Hickory hill $\frac{3}{4}$ Service line leak	Busted Bottom
8-13-19	14.	525 pottershop Rd. Busted bottom	
8-14-19	15.	6242 Hickory Nutt Rd. Busted Bottom	
8-14-19	16.	3061 Ard Ridge Rd. Busted Bottom	
8-15-19	17.	Shady Rest $\frac{3}{4}$ " Service line leak	
8-16-19	18.	446 Gower Ln 2 1" Service line leaks	
8-16-19	19.	rugged ridge $\frac{3}{4}$ Service line leak	
8-16-19	20.	507 hwy 1664 $\frac{3}{4}$ Service line leak	
8-19-19	21.	192 Enchanted dr $\frac{3}{4}$ service line leak	
8-19-19	22.	1319 Kearny Rd $\frac{3}{4}$ " Service leak	
8-19-19	23.	Suits us Drive END 3" Main @ 22°	
8-19-19	24.	2900 Richardson Rd. Busted Bottom	
8-20-19	25.	24 Sage st 1" Service Leak	
8-20-19	26.	128 Breezy hills $\frac{3}{4}$ Service line leak	
8-21-19	27.	1" W.Tapp Rd. $\frac{3}{4}$ " Service line leak	
8-21-19	28.	0.1 M.K Farm Hickory Nutt Busted Bottom	

Monthly Water Use Report

Water Utility:	Western Pulaski Co. Water	PWSID:	1000363
For the Month of:	September	Year:	2019
1 PRODUCTION COST PER THOUSAND		\$0.00	
2 PURCHASE COST PER THOUSAND		\$2.50	
GALLONS		GALLONS	
WATER PRODUCED or PURCHASED		WATER PRODUCED or PURCHASED	
3 Water Produced	\$0.00	0	0%
4 Water Purchased	\$130,128.32	52,051,326	100%
TOTAL PRODUCED AND PURCHASED	52,051,326		
TOTAL COST	\$130,128.32		
WATER SOLD		WATER SOLD	
7 Residential		32,208,873	
8 Commercial		7,495,808	
9 Industrial		0	
10 Bulk Loading Stations		0	
11 Wholesale		0	
12 Other Sales (explain)		0	
13	TOTAL WATER SOLD	39,704,681	76.28%
14	TOTAL WATER NOT SOLD	12,346,645	23.72%
BREAKDOWN OF WATER USAGE			
15 Water Treatment Plant		0	
16 Wastewater Treatment Plant		0	
17 System Flushing		125,000	
18 Fire Department Usage		25,000	
19 Other Usage (explain)	new 8" line flush	300,000	
20	TOTAL USAGE	450,000	
21	WATER LOSS PERCENTAGE FOR RATE PURPOSES	22.86%	
BREAKDOWN OF WATER LOST			
22 Tank Overflows		50,000	
23 Excavation Breaks			
24 Repaired Line Breaks			
25 Unknown Loss		11,846,645	22.76%
26	TOTAL WATER NOT SOLD OR USED	11,896,645	
27	COST OF WATER NOT SOLD OR USED	\$29,741.61	
"UNKNOWN LOSS" FLOW RATE AND COST:			
28	"Unknown Loss"	11,846,645	
29	% "Unknown Loss"	22.76%	
30	Number of Days in Period	30	
31	"Unknown Loss" per Day (Gallons per Day)	394,888	
32	"Unknown Loss" per Minute (GPM)	274.23	
33	"Unknown Loss" Cost for Month	\$29,616.61	



September 2019

1. Busted Bottom Valley View Dr. Wayne
2. Busted Bottom 80 Blue Heron Dr.
- 9-9-19 3. End of Suits ws Dr 3" main line leak
- 1-9-19 4. Lakepoint dr 2" main line leak
- 1-11-19 5. 127 Tannenbaum Dr. $\frac{3}{4}$ " Service Leak
- 3-10-19 6. 3009 Simpson ct. $\frac{3}{4}$ " Service Leak
- 1-13-19 7. 3206 Hwy 837 busted bottom
- 9-17-19 8. 2446 Richardson Rd. busted bottom
- 7-18-19 9. 1215 Shaffer Shopele $\frac{3}{4}$ " service
- 7-19-19 10. 469 Ferry Rd. $\frac{3}{4}$ " Service
- 9-17-19 11. And ridge busted bottom
- 7-20-19 12. 102 Suetta Dr. Service line $\frac{3}{4}$ banded)
- 1-23-19 13. 112 Mallard circle $\frac{3}{4}$ Service line leak
- 1-23-19 14. 1756 slate br spur $\frac{3}{4}$ Service line leak
- 1-24-19 15. 331 breezy hills $\frac{3}{4}$ Service line leak
- 9-24-19 16. 1003 Winding Ridge Dr. $\frac{3}{4}$ service line leak
- 7-24-19 17. 166 Enchanted Dr. $\frac{3}{4}$ Service line leak
- 9-25-19 18. 234 George St. Busted Meter Bottom
- 9-25-19 19. 1362 Thurman Rd. $\frac{3}{4}$ Service leak
- 9-26-19 20. 206 Gwynelle Ct. $\frac{3}{4}$ Service leak
- 9-28-19 21. 6" 914 By-Pass (BAD)
- 9-27-19 22. N. 837 6" (Bad)
- 9-27-19 23. Rock Lick 3" Main
- 1-36-19 24. 7555 Hwy 761 1" Service Leak
- 9-30-19 25. 11th Arlen Dr. $\frac{3}{4}$ " service leak
- 7-28-19 26. W. 80 Busted Bottom @ sardis
- 1-28-19 27. 6" main on 914 lost 220 thousand gallons

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Monthly Water Use Report

Water Utility: **Western Pulaski Co. Water** PWSID: **1000363**

For the Month of: **Ovtober** Year: **2019**

1	PRODUCTION COST PER THOUSAND	\$0.00
2	PURCHASE COST PER THOUSAND	\$2.50

GALLONS

WATER PRODUCED or PURCHASED

3	Water Produced	\$0.00	0	0%
4	Water Purchased	\$116,508.25	46,603,300	100%
5			46,603,300	
6		TOTAL COST	\$116,508.25	

WATER SOLD

7	Residential	28,915,695
8	Commercial	5,439,820
9	Industrial	0
10	Bulk Loading Stations	0
11	Wholesale	0
12	Other Sales (explain)	0
13		TOTAL WATER SOLD
14		34,355,515
		TOTAL WATER NOT SOLD
		12,247,785
		73.72%
		26.28%

BREAKDOWN OF WATER USAGE

15	Water Treatment Plant	0
16	Wastewater Treatment Plant	0
17	System Flushing	200,000
18	Fire Department Usage	25,000
19	Other Usage (explain)	

20		TOTAL USAGE	225,000
21		WATER LOSS PERCENTAGE FOR RATE PURPOSES	25.80%

BREAKDOWN OF WATER LOST

22	Tank Overflows	0
23	Excavation Breaks	0
24	Repaired Line Breaks	
25	Unknown Loss	12,022,785

26		TOTAL WATER NOT SOLD OR USED	12,022,785
27		COST OF WATER NOT SOLD OR USED	\$30,056.96

"UNKNOWN LOSS" FLOW RATE AND COST:

28	"Unknown Loss"	12,022,785
29	% "Unknown Loss"	25.80%
30	Number of Days in Period	31
31	"Unknown Loss" per Day (Gallons per Day)	387,832
32	"Unknown Loss" per Minute (GPM)	269.33
33	"Unknown Loss" Cost for Month	\$30,056.96



Kentucky Rural Water Association

October 2019 LEAKS

- | | | |
|----------|-----|--|
| 10-1-19 | 1. | TANK over flow |
| 10-1-19 | 2. | 84 Buddy tarter |
| 10-1-19 | 3. | 1151 Shaffer Shepola rd |
| 10-8-19 | 4. | Tiger Way behind UPS 3/4" service |
| 10-11-19 | 5. | 1610 South Fork 3/4 service line leak |
| 10-15-19 | 6. | 1412 W Hwy 914 Busted meter |
| 10-16-19 | 7. | 210 Enchanted dr 3/4 service line leak |
| 10-18-19 | 8. | 203 Knob Hill rd 3" main line leak |
| 10-22-19 | 9. | breezy hills 3/4 service line leak |
| 10-22-19 | 10. | Castlewood 3/4 service line leak |
| 10-25-19 | 11. | 780 Joe Lewis rd 1" service line leak |
| 10-25-19 | 12. | 95 Denham rd 2" main line leak |

Monthly Water Use Report

Water Utility: **Western Pulaski Co. Water** PWSID: **1000363**

For the Month of: **November** Year: **2019**

1	PRODUCTION COST PER THOUSAND	\$0.00
2	PURCHASE COST PER THOUSAND	\$2.50

GALLONS

WATER PRODUCED or PURCHASED

3	Water Produced	\$0.00	0	0%
4	Water Purchased	\$108,807.73	43,523,091	100%
5	TOTAL PRODUCED AND PURCHASED		43,523,091	
6	TOTAL COST		\$108,807.73	

WATER SOLD

7	Residential	28,739,354	
8	Commercial	3,291,240	
9	Industrial	0	
10	Bulk Loading Stations	0	
11	Wholesale	0	
12	Other Sales (explain)	0	
13	TOTAL WATER SOLD		32,030,594
14	TOTAL WATER NOT SOLD		11,492,497

BREAKDOWN OF WATER USAGE

15	Water Treatment Plant	0
16	Wastewater Treatment Plant	0
17	System Flushing	300,000
18	Fire Department Usage	50,000
19	Other Usage (explain)	

20	TOTAL USAGE	350,000	
21	WATER LOSS PERCENTAGE FOR RATE PURPOSES		25.60%

BREAKDOWN OF WATER LOST

22	Tank Overflows	0	
23	Excavation Breaks		
24	Repaired Line Breaks		
25	Unknown Loss	11,142,497	
26	TOTAL WATER NOT SOLD OR USED		11,142,497
27	COST OF WATER NOT SOLD OR USED		\$27,856.24

"UNKNOWN LOSS" FLOW RATE AND COST:

28	"Unknown Loss"	11,142,497
29	% "Unknown Loss"	25.60%
30	Number of Days in Period	30
31	"Unknown Loss" per Day (Gallons per Day)	371,417
32	"Unknown Loss" per Minute (GPM)	257.93
33	"Unknown Loss" Cost for Month	\$27,856.24



Kentucky Rural Water Association

Nov 2019 Water leaks

- 1-6-19 1. 1452 Thurman rd $\frac{3}{4}$ service line leak
- 6-19 2. 1432 Thurman rd $\frac{3}{4}$ service line leak
- 1-8-19 3. 2993 & Dixon rd 6" main line leak
- 9-19 4. 212 Austin rd regulator leaking
- 1-11-19 5. 39 Day meadow $\frac{3}{4}$ service line leak
- 1-14-19 6. 4174 Oakhill rd 6" main line leak
- 1-21-19 7. 111 Service line ramp rd
- 2-8-19 8. 836 hwy 1674 $\frac{3}{4}$ service line leak
- 2-7-19 9. 1773 Cliffy rd busted bottom
- 1-29-17 10. 195 Ford hollow Rd.

Monthly Water Use Report

Water Utility: **Western Pulaski Co. Water** PWSID: **1000363**

For the Month of: **December** Year: **2019**

1 PRODUCTION COST PER THOUSAND	\$0.00
2 PURCHASE COST PER THOUSAND	\$2.50

GALLONS

WATER PRODUCED or PURCHASED

3 Water Produced	\$0.00	0	0%
4 Water Purchased	\$101,568.96	40,627,585	100%
TOTAL PRODUCED AND PURCHASED		40,627,585	
TOTAL COST		\$101,568.96	

WATER SOLD

7 Residential	23,994,754
8 Commercial	1,973,910
9 Industrial	0
10 Bulk Loading Stations	0
11 Wholesale	0
12 Other Sales (explain)	0

13	TOTAL WATER SOLD	25,968,664	63.92%
14	TOTAL WATER NOT SOLD	14,658,921	36.08%

BREAKDOWN OF WATER USAGE

15 Water Treatment Plant	0
16 Wastewater Treatment Plant	0
17 System Flushing	125,000
18 Fire Department Usage	15,000
19 Other Usage (explain)	0

20	TOTAL USAGE	140,000
21	WATER LOSS PERCENTAGE FOR RATE PURPOSES	35.74%

BREAKDOWN OF WATER LOST

22 Tank Overflows	0
23 Excavation Breaks	0
24 Repaired Line Breaks	0
25 Unknown Loss	14,518,921

26	TOTAL WATER NOT SOLD OR USED	14,518,921
27	COST OF WATER NOT SOLD OR USED	\$36,297.30

"UNKNOWN LOSS" FLOW RATE AND COST:

28	"Unknown Loss"	14,518,921
29	% "Unknown Loss"	35.74%
30	Number of Days in Period	31
31	"Unknown Loss" per Day (Gallons per Day)	468,352
32	"Unknown Loss" per Minute (GPM)	325.24
33	"Unknown Loss" Cost for Month	\$36,297.30

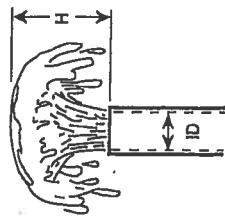


Kentucky Rural Water Association

Date	Dec 2019 Water Leaks
12-2-19	1. Goldenburg Ln. 3" main line leak
12-4-19	2. Calvary Church 3/4" service line leak
12-5-19	3. 1621 Patterson branch 3/4" Service Leak
12-11-19	4. 1412 Wt/o 3" main line leak
12-18-19	5. 1705 Sherri Dr. 3/4" service
12-18-19	6. Min spring setter leak
12-20-19	7. 189 Jody Dr 3/4 service line leak
12-21-19	8. Oakhill Rd across from church 6" main
	9.
	10.

EXHIBIT A-1

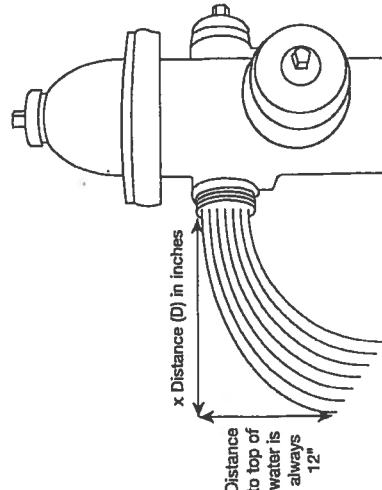
Estimating Flow from a Vertical Pipe



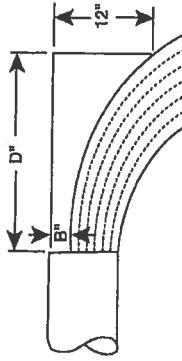
I.D. Pipe, inches	Flow in Gallons per Minute										
	3	3.5	4	4.5	5	5.5	6	7	8	10	12
2	38	41	44	47	50	53	56	61	65	74	82
3	81	89	96	103	109	114	120	132	141	160	177
4	137	151	163	174	185	195	205	222	240	269	299
6	318	349	378	405	430	455	480	520	560	635	700
8	567	623	684	730	776	821	868	945	1020	1150	1270
10	950	1055	1115	1200	1280	1350	1415	1530	1640	1840	2010

2½" Hydrant Nozzle

The approximate flow from a 2½" hydrant nozzle can be determined by measuring the distance of the water flow at a point 12" below the top of the water as it leaves the nozzle.



Estimating Discharge from a Horizontal Pipe not Running Full Flow



$$\text{Flow (gpm)} = A \times D \times 1.039 \times F$$

A = Area of pipe in sq. in. = inside dia² x 0.7854

D = Horizontal distance in inches

F = Effective area factor obtained from table at right

Example:

Given: Inside dia pipe = 6 inches
D = 16 inches
B = 4 inches

$$\begin{aligned} A &= 36 \times 0.7854 = 28.3 \text{ in}^2 \\ \text{Ratio } B/D &= 4/16 = 25\% \\ F &= 0.805 \text{ (from table)} \end{aligned}$$

$$\begin{aligned} \text{Flow (gpm)} &= A \times D \times 1.039 \times F \\ &= 28.3 \times 16 \times 1.039 \times 0.805 \\ &= 379 \text{ gpm (approx)} \end{aligned}$$

Distance (D) in inches	Flow in gpm
6"	30
8"	40
10"	50
12"	60
14"	70
16"	80
18"	90
20"	100
30"	150

EXHIBIT B

Date

Jan 2019 Water Leaks

- 1-9-19 1. 6" main line leak at Sleepy Hollow
1-8-19 2. Roger Owen's $\frac{3}{4}$ service line leak
1-8-19 3. 218 Normandy Ct Service line leak
1-21-19 4. Tim Tarter meter 761 Busted (3510)
1-21-19 5. Wolf Creek marine 3" Main
1-22-19 6. 1" Service @ Shepols Rd.
1-28-19 7. 119 observation pt 1" service line leak
1-28-19 8. 676 hideaway dr busted bottom
1-31-19 9. Daws Ridge Busted Bottom
10.

(~~3/4~~) STOPPED METERS January)

DateFeb 2019 Leaks

- 2-1-19 1 Davis Ridge Rd. busted water bottom
- 2-4-19 2 102 Karaha Ln. $\frac{3}{4}$ " Service
- 2-4-19 3 5993 W. Hwy 90 $\frac{3}{4}$ " service
- 2-4-19 4 305 Patterson branch $\frac{3}{4}$ " service
- 2-8-19 5 Bottom of Clift Hill Rd. 1" service
- 2-9-19 6 6" main @ Campbell's Rd.
- 2-10-19 7 6" main @ slate branch Rd.
- 2-11-19 8 1" Service leak over hill Clift Rd.
- 2-14-19 9 305 Patterson br $\frac{3}{4}$ " service line leak
- 2-14-19 10 Wilson + Ray Shop $\frac{3}{4}$ " service line leak
- 2-14-19 11 bridle brook . 3" main line leak
- 2-14-19 12 bridle brook 3" main line leaking at 22 + slip couplin
- 2-19-19 13 Hickory Hill $\frac{3}{4}$ " service line leak
- 2-21-19 14 6" Main leak SW. 80 @ Sleepy hollow
- 2-25-19 15 1600 WTLR rd $\frac{3}{4}$ " service line leak
- 2-25-19 16 1166 Oak Hill Rd. Busted Bottom
- 2-25-19 17 Higgin's Ctr. Busted Bottom
- 18
- 19
- 20

Mar 2019 Water Leaks

- | | | |
|---------|-----|--|
| 3-7-19 | 1. | 8" Main leak (Bad) |
| 3-11-19 | 2. | 56 Summerwind $\frac{3}{4}$ " Service line |
| 3-11-19 | 3. | Todd rd 3" main line |
| 3-19-19 | 4. | 200 mooreland rd service line leak |
| 3-19-19 | 5. | 3009 Simpson dr $\frac{3}{4}$ " service line leak |
| 3-20-19 | 6. | 3011 Simpson dr 1" service line leak |
| 3-20-19 | 7. | 1901 Tigers Way $\frac{3}{4}$ " service line leak |
| 3-21-19 | 8. | 1825 Wolf creek rd 1" service line leak |
| 3-21-19 | 9. | 2329 Ringgold rd 4" main line leak |
| 3-21-19 | 10. | Cedar crest regulator pit 2" main |
| 3-21-19 | 11. | 81 Todd blvd $\frac{3}{4}$ " service line leak |
| 3-24-19 | 12. | 168 Lakebreeze busted meter bottom |
| 3-29-19 | 13. | Calvary baptist church $\frac{3}{4}$ " service line leak |

April 2019 LEAK'S

- | | | | |
|---------|-----|---|---|
| 4-1-19 | 1) | 684 Topping Street leaking Hwy 1248 ⁴⁻²¹⁻²⁸) | 490 Ferry Rd - Busted |
| 4-2-19 | 2) | Royce Shop $\frac{3}{4}$ " Service leak | ⁴⁻²⁵ 29) 171 Arlen dr $\frac{3}{4}$ service line |
| 4-2-19 | 3) | W. 80 Dance hall 1" service leak | ⁴⁻²⁸ 30) Circle pt Busted Bottom |
| 4-3-19 | 4) | 828 Hwy 235 $\frac{3}{4}$ service line leak | ⁴⁻²⁹ 31) 8" Ringsold Rd (New line |
| 4-14 | 5) | Enchanted dr $\frac{1}{2}$ " Service line leak | 32) |
| 4-19 | 6) | Shady grove rd 3" main line leak | 33) |
| 4-8-19 | 7) | Danielle Ln. 1" service line leak | |
| 4-10-19 | 8) | 204R Recreational Rd Recreational service line leak | |
| 4-10-19 | 9) | 295 Wilson Rd service line leak | |
| 4-14-19 | 10) | Valley rd 3" main line leak | |
| 4-12-19 | 11) | 155 Danielle Ln. 1" Service leak | |
| 4-15-19 | 12) | 1" Service line in (3 places) Lee's forced | |
| 4-16-19 | 13) | Boat place on 80 across from 3345 $\frac{3}{4}$ service line leak | |
| 4-16-19 | 14) | 171 Enchanted dr $\frac{3}{4}$ service line leak | |
| 4-16-19 | 15) | 510 Oakland dr 3" main line leak | |
| 4-16-19 | 16) | 1441 Hwy 1674 $\frac{3}{4}$ service line leak | |
| 4-17-19 | 17) | 3905 Hickory Hill dr $\frac{3}{4}$ service line leak | |
| 4-17-19 | 18) | Slate branch spars @ END 3" Main | |
| 4-17-19 | 19) | Busted Bottom Gouer Ln. | |
| 4-18-19 | 20) | 3714 Hickory Hill Busted Bottom | |
| 4-18-19 | 21) | Oakwood Oakwood rd Busted Bottom | |
| 4-22-19 | 22) | 150 Creekwood $\frac{3}{4}$ " Service | |
| 4-22-19 | 23) | Country pt. Ln. $\frac{3}{4}$ " Service | |
| 4-22-19 | 24) | 980 slate branch Busted meter Bottom | |
| 4-23-19 | 25) | Robin Dr. 3" main | |
| 4-24-19 | 26) | Fish -N- ski Busted Bottom | |
| 4-24-19 | 27) | 115 Holdren Ct. Busted Bottom | |

May 2019 Water Leaks

5-1-19	1.	12 Deck Dr. Busted Bottom	29-171 Enchanted dr $\frac{3}{4}$ " service line leak
5-1-19	2.	93 Kalsons ct $\frac{3}{4}$ " service line leak	
5-1-19	3.	6141 W Hwy 80 $\frac{3}{4}$ " service line leak	
5-1-19	4.	3160 Hwy 2993 busted meter bottom	
5-2-19	5.	505 Nature Point $\frac{3}{4}$ " service line leak	
5-2-19	6.	1039 Hwy 3091 $\frac{3}{4}$ " service line leak	
5-7-19	7.	Charlie Beasley loop $\frac{3}{4}$ " service line leak	
5-10-19	8.	Buck Trail 3" main line leak	
5-11-19	9.	2160 Circle Pt. Busted Bottom	
5-14-19	10.	T-oaks rd $\frac{3}{4}$ " service line leak	
5-16-19	11.	2021 Lynnwood Dr. Busted meter	
5-16-19	12.	Lookout circle $\frac{3}{4}$ " service line leak	
5-16-19	13.	1014 South Fork dr $\frac{3}{4}$ " service line leak	
5-16-19	14.	621 Frather dr $\frac{3}{4}$ " service line leak	
5-17-19	15.	5893 W. 80 $\frac{3}{4}$ " service line leak	
5-17-19	16.	102 Smetta Ave $\frac{3}{4}$ " service line leak	
5-20-19	17.	1905 Rollin dr $\frac{3}{4}$ " service line leak	
5-20-19	18.	1908 Rollin dr $\frac{3}{4}$ " service line leak	
5-21-19	19.	66 15th St Busted Bottom	
5-22-19	20.	Chequers Dairy 6" main line	
5-23-19	21.	1903 Tigers way 3/4" service	
5-24-19	22.	2823 Lenetawn rd 1" service line leak	
5-28-19	23.	85 Hwy 235 $\frac{3}{4}$ " service line leak	
5-28-19	24.	Bates rd $\frac{3}{4}$ " service line leak	
5-28-19	25.	Robin dr 3" main line leak	
5-31-19	26.	6484 Ziv 80 Busted meter	
5-31-19	27.	175 Muse Ln 1" Service line leak	
5-31-19	28.	860 Old Columbia rd $\frac{3}{4}$ " service line leak	

June 2019 Water Leaks

- 6-3-19 1- 277 bates rd $\frac{3}{4}$ " service line leak
6-3-19 2- 219 oakview dr $\frac{3}{4}$ " service line leak
6-3-19 3- 205 Richwood dr $\frac{3}{4}$ " service line leak
6-4-19 4- Fish N Ski $\frac{3}{4}$ " service line leak
6-6-19 5- 1447 Oakhill Rd. Service leak
6-8-19 6- 6" Main Leak old millspring (Larry Sheppards farm)
6-11-19 7- 8" main leak Hickory Nut Rd. Bottom of Hill (Contractors)
6-12-19 8- Woodland dr $\frac{3}{4}$ " service line leak
6-14-19 9- 3230 Ard Ridge Rd. huston MT Bottom
6-14-19 10- Puddley Hill Busted meter bottom
6-17-19 11- Busted meter bottom Cover Ln.
6-18-19 12- 6" Main Side branch @ oak hill
6-19-19 13- 88 Jody Way $\frac{3}{4}$ " Service line leak
6-19-19 14- 6450 Hwy 761 $\frac{3}{4}$ " service line leak
6-20-19 15- 914 Bypass 6" main
6-21-19 16- 48 cover LN Busted bottom
6-21-19 17- Wild wood DR.
6-22-19 18- 512 water clifft DR. Busted bottom
6-25-19 19- 512 Clifft Rd. $\frac{3}{4}$ " Service leak
6-26-19 20- 810 Coffey Rd $\frac{3}{4}$ " Service leak

21

22

23

24

25

July 2019 Water Leaks

7-1-19	1.	Luke stevens lts	$\frac{3}{4}$ " service line
7-1-19	2.	1775 patterson branch	$\frac{3}{4}$ " service line
7-1-19	3.	200. moreland DR.	$\frac{3}{4}$ " Service line
7-1-19	4.	Todd rd	3" main line leak
7-1-19	5.	87 summer wind dr	busted meter bottom
7-3-19	6.	Sleepy Hollow	$\frac{3}{4}$ " service line
7-4-19	7.	W.hwy 80 at H.E. blonds storage buildings	busted meter bottom
7-8-19	8.	2904 Richardson rd	$\frac{3}{4}$ " service line leak
7-8-19	9.	109 evert ln.	Busted Bottom
7-9-19	10.	220 Redmond Rd.	Busted Bottom
7-9-19	11.	Lakefield DR.	1" service leak
7-9-19	12.	Branchwood DR.	$\frac{3}{4}$ " service leak
7-9-19	13.	8882 Hwy 761	$\frac{3}{4}$ " service leak
7-9-19	14.	Chickasaw rd	3" main line leak
7-12-19	15.	15919 W.hwy. 80	6" main line leak
7-12-19	16.	307 buckeye dr	$\frac{3}{4}$ " service line leak
7-13-19	17.	49 Edge water pt	$\frac{3}{4}$ " service leak
7-14-19	18.	314 Hwy 235	Busted Bottom
7-15-19	19.	3904 Rollin dr	$\frac{3}{4}$ " service line leak
7-19	20.	3830 hickory Hill	$\frac{3}{4}$ " service line leak
7-15-19	21.	525 branchwood dr	$\frac{3}{4}$ " service line leak
7-15-19	22.	white oak dr	$\frac{3}{4}$ " service line leak
7-16-19	23.	Hwy 761	4" Main state hit line
7-17-19	24.	patterson branch	leak 4" Main
7-18-19	25.	Hwy 761	leak 3" Main
7-19-19	26.	1550 Bridge Hollow Rd	busted MT bottom
7-19-19	27.	960 new hope rd	$\frac{3}{4}$ " service line leak
7-19-19	28.	812 Woodline dr	$\frac{3}{4}$ " service line leak

August 2019 LEAKS

			10"	8-22
8-1-19	1.	1292 State Dr. st. 6" main line leak		
8-1-19	2.	8611 W. Hwy 80 Service line leak $\frac{3}{4}$ "		
8-1-19	3.	Prather Rd @ Tuoppa $\frac{3}{4}$ " service		
8-2-19	4.	141 Park Forest $\frac{3}{4}$ " service line leak		
8-5-19	5.	intersection of Renf rd & overlook 1" service line		
8-6-19	6.	Berry Turpin $\frac{3}{4}$ " Service line leak		
8-7-19	7.	Lakepointe rd. 3" main line leak		
8-7-19	8.	End of Rd ridge busted bottom		
8-9-19	9.	Heartland dr $\frac{3}{4}$ " service line leak		
8-9-19	10.	North bass circle. 2-1" service line leaks		
8-11-19	11.	W.hwy. 80 At Pumpstation 8" main line leak		
8-12-19	12.	Piney Grove Rd. 4" main line leak		
8-13-19	13.	3812 Hickory hill $\frac{3}{4}$ " service line leak		
8-13-19	14.	525 Pottershop Rd. Busted bottom		
8-14-19	15.	6242 Hickory Nutt Rd. Busted Bottom		
8-14-19	16.	3061 Ard Ridge Rd. Busted Bottom		
8-15-19	17.	Shady Rest $\frac{3}{4}$ " service line leak		
8-16-19	18.	446 Gauer Ln. 2 1" service line leaks		
8-16-19	19.	Rugged ridge $\frac{3}{4}$ " service line leak		
8-16-19	20.	507 Hwy. 1664 $\frac{3}{4}$ " service line leak		
8-19-19	21.	192 Enchanted dr $\frac{3}{4}$ " service line leak		
8-19-19	22.	1319 Kearny Rd. $\frac{3}{4}$ " service leak		
8-19-19	23.	Suits.us Drive END 3" Main @ 22°		
8-19-19	24.	2900 Richardson Rd. Busted Bottom		
8-20-19	25.	24. Sage st. 1" service leak		
8-20-19	26.	276 Breezy hills $\frac{3}{4}$ " service line leak		
8-21-19	27.	16 M.Tapp. Rd. $\frac{3}{4}$ " Service line leak		
8-21-19	28.	on 1 m.w. S... 11-12km. 21.77 2. stand Radman		

September 2019

1. Busted Bottom Valley View Dr. Nancy
2. Busted Bottom 80 Blue Heron Dr.
- 9-9-19 3. End of Suits ws Dr. 3" main line leak
- 9-19 4. Lakepoint Dr. 3" main line leak
- 11-19 5. 127 Trentham Dr. $\frac{3}{4}$ " Service leak
- 1-10-19 6. 3009 Simpson Ct. $\frac{3}{4}$ " Service Leak
- 1-13-19 7. 3206 Hwy 837 busted bottom
- 2-17-19 8. 2446 Richardson Rd. busted bottom
- 3-18-19 9. 1215 Shaffer Shopole $\frac{3}{4}$ " service
- 4-19-19 10. 469 Ferry Rd. $\frac{3}{4}$ " Service
- 5-17-19 11. And ridge busted bottom
- 1-20-19 12. 102 Sweet Dr. Service line $\frac{3}{4}$ " banded
- 2-23-19 13. 112 Mallard circle $\frac{3}{4}$ " Service line leak
- 2-23-19 14. 1756 slate br spur $\frac{3}{4}$ " Service line leak
- 2-24-19 15. 331 breezy hills $\frac{3}{4}$ " Service line leak
- 7-24-19 16. 1003 Winding Ridge Dr. $\frac{3}{4}$ " service line leak
- 1-24-19 17. 166 Enchanted Dr. $\frac{3}{4}$ " Service line leak
- 1-25-19 18. 234 George St. Busted Meter Bottom
- 2-25-19 19. 1362 Thurman Rd. $\frac{3}{4}$ " Service leak
- 7-26-19 20. 301 Gaynelle Ct. $\frac{3}{4}$ " Service leak
- 7-28-19 21. 6" 914 By-Dress (BAD)
- 1-27-19 22. N. 837 6" (Bad)
- 1-27-19 23. Rock Lick 3" Main
- 3-6-19 24. 7555 Hwy 761 1" Service leak
- 1-30-19 25. P'Arlen Dr. $\frac{3}{4}$ " service leak
- 28-19 26. W. 80 Busted Bottom @ sandis
- 28-19 27. 6" main on 914 lost 220 thousand gallons

October 2019 LEAKS

- | | | |
|---------|-----|--|
| 10-1-19 | 1. | TANK over flow' |
| 10-1-19 | 2. | 84 Buddy terer |
| 0-1-19 | 3. | 1151 Shaffer Shepala rd |
| 0-8-19 | 4. | Tiger Way behind UPS 3/4" service |
| 7-11-19 | 5. | 1010 South Fork 3/4 service line leak |
| 2-15-19 | 6. | 1412 W Hwy 914 Busted meter |
| 3-16-19 | 7. | 210 Enchanted dr 3/4 service line leak |
| 3-18-19 | 8. | 203 Knob Hill rd 3" main line leak |
| 3-22-19 | 9. | breezy hills 3/4 service line leak |
| 3-22-19 | 10. | Castlewood 3/4 service line leak |
| 7-25-19 | 11. | 780 Joe Lewis rd 1" service line leak |
| 7-25-19 | 12. | 95 Denham rd 2" main line leak |

Nov 2019 Water leaks

- | | | | |
|---------|-----|-------------------------|-----------------------------------|
| 1-6-19 | 1. | 1452 Thurman rd | $\frac{3}{4}$ " service line leak |
| -6-19 | 2. | 1432 Thurman rd | $\frac{3}{4}$ " service line leak |
| -8-19 | 3. | 2993 & Dixon rd | 6" main line leak |
| -9-19 | 4. | 262 Austin rd | regulator leaking |
| -11-19 | 5. | 39 Day Meadow | $\frac{3}{4}$ " service line leak |
| -14-19 | 6. | 4174 Oakhill rd | 6" main line leak |
| 1-24-19 | 7. | 11 service line camp rd | |
| 28-19 | 8. | 836 Hwy 1674 | $\frac{3}{4}$ " service line leak |
| 27-19 | 9. | 1723 Clifftop rd | busted bottom |
| 1-29-19 | 10. | 195 Forest Hollow Rd. | |

Date

Dec 2019 Water leaks

- 2-2-19 1. Goldenburg Ln. 3" main line leak
- 2-4-19 2. Calvary Church. $\frac{3}{4}$ " Service line leak
- 2-5-19 3. 1621 Patterson branch $\frac{3}{4}$ " Service Leak
- 2-11-19 4. 1412 Wt/o 3" main line leak
- 2-18-19 5. 1705 Sherri Dr. $\frac{3}{4}$ " Service
- 2-18-19 6. Min spring setter leak
- 2-20-19 7. 189 Jody dr $\frac{3}{4}$ Service line leak
- 2-21-19 8. Oak hill Rd across from church 6" main
- 9.
- 10.

EXHIBIT C

EXHIBIT D

RD Bond 2002A

<u>year</u>	<u>interest</u>	<u>principal</u>	<u>total payment</u>	12/31/12 balance
1/1/2013	18,270	13,000	31,270	812,000
7/1/2013	17,978	-	17,978	799,000
1/1/2014	17,978	14,000	31,978	785,000
7/1/2014	17,663	-	17,663	785,000
1/1/2015	17,663	14,000	31,663	771,000
7/1/2015	17,348	-	17,348	771,000
1/1/2016	17,348	15,000	32,348	756,000
7/1/2016	17,010	-	17,010	756,000
1/1/2017	17,010	16,000	33,010	740,000
7/1/2017	16,650	-	16,650	740,000
1/1/2018	16,650	16,000	32,650	724,000
7/1/2018	16,290	-	16,290	724,000
1/1/2019	16,290	18,000	34,290	706,000
7/1/2019	15,885	-	15,885	706,000
1/1/2020	15,885	18,000	33,885	688,000
7/1/2020	15,480	-	15,480	688,000
1/1/2021	15,480	19,000	34,480	669,000
7/1/2021	15,053	-	15,053	669,000
1/1/2022	15,053	20,000	35,053	649,000
7/1/2022	14,603	-	14,603	649,000
1/1/2023	14,603	21,000	35,603	628,000
7/1/2023	14,130	-	14,130	628,000
1/1/2024	14,130	21,000	35,130	607,000
7/1/2024	13,658	-	13,658	607,000
1/1/2025	13,658	23,000	36,658	584,000
7/1/2025	13,140	-	13,140	584,000
1/1/2026	13,140	23,000	36,140	561,000
7/1/2026	12,623	-	12,623	561,000
1/1/2027	12,623	25,000	37,623	536,000
7/1/2027	12,060	-	12,060	536,000
1/1/2028	12,060	26,000	38,060	510,000
7/1/2028	11,475	-	11,475	510,000
1/1/2029	11,475	27,000	38,475	483,000
7/1/2029	10,868	-	10,868	483,000
1/1/2030	10,868	28,000	38,868	455,000
7/1/2030	10,238	-	10,238	455,000
1/1/2031	10,238	29,000	39,238	426,000
7/1/2031	9,585	-	9,585	426,000
1/1/2032	9,585	31,000	40,585	395,000
7/1/2032	8,888	-	8,888	395,000
1/1/2033	8,888	32,000	40,888	363,000
7/1/2033	8,168	-	8,168	363,000
1/1/2034	8,168	34,000	42,168	329,000
7/1/2034	7,403	-	7,403	329,000
1/1/2035	7,403	35,000	42,403	294,000
7/1/2035	6,615	-	6,615	294,000
1/1/2036	6,615	37,000	43,615	257,000
7/1/2036	5,783	-	5,783	257,000
1/1/2037	5,783	38,000	43,783	219,000
7/1/2037	4,928	-	4,928	219,000
1/1/2038	4,928	40,000	44,928	179,000

7/1/2038	4,028	-	4,028	179,000
1/1/2039	4,028	42,000	46,028	137,000
7/1/2039	3,083	-	3,083	137,000
1/1/2040	3,083	44,000	47,083	93,000
7/1/2040	2,093	-	2,093	93,000
1/1/2041	2,093	46,000	48,093	47,000
7/1/2041	1,058	-	1,058	47,000
1/1/2042	1,058	47,000	48,058	-
	665,820	812,000	1,477,820	

RD Bond 2002B

<u>year</u>	<u>interest</u>	<u>principal</u>	<u>total payment</u>	12/31/12 balance
1/1/2013	11,138	8,000	19,138	495,000
7/1/2013	10,958	-	10,958	487,000
1/1/2014	10,958	9,000	19,958	478,000
7/1/2014	10,755	-	10,755	478,000
1/1/2015	10,755	9,000	19,755	469,000
7/1/2015	10,553	-	10,553	469,000
1/1/2016	10,553	9,000	19,553	460,000
7/1/2016	10,350	-	10,350	460,000
1/1/2017	10,350	10,000	20,350	450,000
7/1/2017	10,125	-	10,125	450,000
1/1/2018	10,125	10,000	20,125	440,000
7/1/2018	9,900	-	9,900	440,000
1/1/2019	9,900	11,000	20,900	429,000
7/1/2019	9,653	-	9,653	429,000
1/1/2020	9,653	11,000	20,653	418,000
7/1/2020	9,405	-	9,405	418,000
1/1/2021	9,405	12,000	21,405	406,000
7/1/2021	9,135	-	9,135	406,000
1/1/2022	9,135	12,000	21,135	394,000
7/1/2022	8,865	-	8,865	394,000
1/1/2023	8,865	13,000	21,865	381,000
7/1/2023	8,573	-	8,573	381,000
1/1/2024	8,573	13,000	21,573	368,000
7/1/2024	8,280	-	8,280	368,000
1/1/2025	8,280	14,000	22,280	354,000
7/1/2025	7,965	-	7,965	354,000
1/1/2026	7,965	14,000	21,965	340,000
7/1/2026	7,650	-	7,650	340,000
1/1/2027	7,650	15,000	22,650	325,000
7/1/2027	7,313	-	7,313	325,000
1/1/2028	7,313	16,000	23,313	309,000
7/1/2028	6,953	-	6,953	309,000
1/1/2029	6,953	16,000	22,953	293,000
7/1/2029	6,593	-	6,593	293,000
1/1/2030	6,593	18,000	24,593	275,000
7/1/2030	6,188	-	6,188	275,000
1/1/2031	6,188	18,000	24,188	257,000
7/1/2031	5,783	-	5,783	257,000
1/1/2032	5,783	19,000	24,783	238,000
7/1/2032	5,355	-	5,355	238,000
1/1/2033	5,355	20,000	25,355	218,000
7/1/2033	4,905	-	4,905	218,000
1/1/2034	4,905	21,000	25,905	197,000
7/1/2034	4,433	-	4,433	197,000
1/1/2035	4,433	21,000	25,433	176,000
7/1/2035	3,960	-	3,960	176,000
1/1/2036	3,960	23,000	26,960	153,000
7/1/2036	3,443	-	3,443	153,000
1/1/2037	3,443	22,000	25,443	131,000
7/1/2037	2,948	-	2,948	131,000
1/1/2038	2,948	24,000	26,948	107,000

7/1/2038	2,408	-	2,408	107,000
1/1/2039	2,408	25,000	27,408	82,000
7/1/2039	1,845	-	1,845	82,000
1/1/2040	1,845	26,000	27,845	56,000
7/1/2040	1,260	-	1,260	56,000
1/1/2041	1,260	27,000	28,260	29,000
7/1/2041	653	-	653	29,000
1/1/2042	653	29,000	29,653	-
	403,538	495,000	898,538	

RD Bond 2010

<u>year</u>	<u>interest</u>	<u>principal</u>	<u>total payment</u>	<u>12/31/12 balance</u>
1/1/2013	10,091	14,500	24,591	897,000
7/1/2013	9,928	-	9,928	882,500
1/1/2014	9,928	14,500	24,428	868,000
7/1/2014	9,765	-	9,765	868,000
1/1/2015	9,765	15,000	24,765	853,000
7/1/2015	9,596	-	9,596	853,000
1/1/2016	9,596	15,500	25,096	837,500
7/1/2016	9,422	-	9,422	837,500
1/1/2017	9,422	16,000	25,422	821,500
7/1/2017	9,242	-	9,242	821,500
1/1/2018	9,242	16,500	25,742	805,000
7/1/2018	9,056	-	9,056	805,000
1/1/2019	9,056	17,000	26,056	788,000
7/1/2019	8,865	-	8,865	788,000
1/1/2020	8,865	17,500	26,365	770,500
7/1/2020	8,668	-	8,668	770,500
1/1/2021	8,668	18,000	26,668	752,500
7/1/2021	8,466	-	8,466	752,500
1/1/2022	8,466	18,500	26,966	734,000
7/1/2022	8,258	-	8,258	734,000
1/1/2023	8,258	19,000	27,258	715,000
7/1/2023	8,044	-	8,044	715,000
1/1/2024	8,044	19,500	27,544	695,500
7/1/2024	7,824	-	7,824	695,500
1/1/2025	7,824	20,000	27,824	675,500
7/1/2025	7,599	-	7,599	675,500
1/1/2026	7,599	20,500	28,099	655,000
7/1/2026	7,369	-	7,369	655,000
1/1/2027	7,369	21,000	28,369	634,000
7/1/2027	7,133	-	7,133	634,000
1/1/2028	7,133	21,500	28,633	612,500
7/1/2028	6,891	-	6,891	612,500
1/1/2029	6,891	22,000	28,891	590,500
7/1/2029	6,643	-	6,643	590,500
1/1/2030	6,643	22,500	29,143	568,000
7/1/2030	6,390	-	6,390	568,000
1/1/2031	6,390	23,500	29,890	544,500
7/1/2031	6,126	-	6,126	544,500
1/1/2032	6,126	24,000	30,126	520,500
7/1/2032	5,856	-	5,856	520,500
1/1/2033	5,856	24,500	30,356	496,000
7/1/2033	5,580	-	5,580	496,000
1/1/2034	5,580	25,500	31,080	470,500
7/1/2034	5,293	-	5,293	470,500
1/1/2035	5,293	26,000	31,293	444,500
7/1/2035	5,001	-	5,001	444,500
1/1/2036	5,001	26,500	31,501	418,000
7/1/2036	4,703	-	4,703	418,000
1/1/2037	4,703	27,500	32,203	390,500
7/1/2037	4,393	-	4,393	390,500
1/1/2038	4,393	28,000	32,393	362,500

7/1/2038	4,078	-	4,078	362,500
1/1/2039	4,078	29,000	33,078	333,500
7/1/2039	3,752	-	3,752	333,500
1/1/2040	3,752	30,000	33,752	303,500
7/1/2040	3,414	-	3,414	303,500
1/1/2041	3,414	30,500	33,914	273,000
7/1/2041	3,071	-	3,071	273,000
1/1/2042	3,071	31,500	34,571	241,500
7/1/2042	2,717	-	2,717	241,500
1/1/2043	2,717	32,500	35,217	209,000
7/1/2043	2,351	-	2,351	209,000
1/1/2044	2,351	33,000	35,351	176,000
7/1/2044	1,980	-	1,980	176,000
1/1/2045	1,980	34,000	35,980	142,000
7/1/2045	1,598	-	1,598	142,000
1/1/2046	1,598	35,000	36,598	107,000
7/1/2046	1,204	-	1,204	107,000
1/1/2047	1,204	36,000	37,204	71,000
7/1/2047	799	-	799	71,000
1/1/2048	799	37,000	37,799	34,000
7/1/2048	383	-	383	34,000
1/1/2049	383	34,000	34,383	-
	433,001	897,000	1,330,001	

KRW Note

<u>year</u>	<u>interest</u>	<u>principal</u>	<u>total payment</u>	<u>12/31/12 balance</u>
2013	56,666	55,000	111,666	2,080,000
2014	60,235	115,000	175,235	2,025,000
2015	57,705	115,000	172,705	1,910,000
2016	55,175	120,000	175,175	1,795,000
2017	52,535	120,000	172,535	1,675,000
2018	49,895	125,000	174,895	1,555,000
2019	46,833	125,000	171,833	1,430,000
2020	42,833	130,000	172,833	1,305,000
2021	38,673	135,000	173,673	1,175,000
2022	34,353	140,000	174,353	1,040,000
2023	29,873	140,000	169,873	900,000
2024	25,393	145,000	170,393	760,000
2025	20,753	155,000	175,753	615,000
2026	15,793	40,000	55,793	460,000
2027	14,513	40,000	54,513	420,000
2028	13,233	40,000	53,233	380,000
2029	11,953	45,000	56,953	340,000
2030	10,445	45,000	55,445	295,000
2031	8,938	45,000	53,938	250,000
2032	7,385	50,000	57,385	205,000
2033	5,660	50,000	55,660	155,000
2034	3,885	50,000	53,885	105,000
2035	2,035	55,000	57,035	55,000
	664,756	2,080,000	2,744,756	-

RD Bond 2013

<u>year</u>	<u>interest</u>	<u>principal</u>	<u>total payment</u>	<u>1,400,000</u>
7/1/2015	14,326	-	14,326	1,400,000
1/1/2016	15,750	23,500	39,250	1,376,500
7/1/2016	15,486	-	15,486	1,376,500
1/1/2017	15,486	24,000	39,486	1,352,500
7/1/2017	15,216	-	15,216	1,352,500
1/1/2018	15,216	25,000	40,216	1,327,500
7/1/2018	14,934	-	14,934	1,327,500
1/1/2019	14,934	25,500	40,434	1,302,000
7/1/2019	14,648	-	14,648	1,302,000
1/1/2020	14,648	26,000	40,648	1,276,000
7/1/2020	14,355	-	14,355	1,276,000
1/1/2021	14,355	26,500	40,855	1,249,500
7/1/2021	14,057	-	14,057	1,249,500
1/1/2022	14,057	27,000	41,057	1,222,500
7/1/2022	13,753	-	13,753	1,222,500
1/1/2023	13,753	27,500	41,253	1,195,000
7/1/2023	13,444	-	13,444	1,195,000
1/1/2024	13,444	28,500	41,944	1,166,500
7/1/2024	13,123	-	13,123	1,166,500
1/1/2025	13,123	29,000	42,123	1,137,500
7/1/2025	12,797	-	12,797	1,137,500
1/1/2026	12,797	29,500	42,297	1,108,000
7/1/2026	12,465	-	12,465	1,108,000
1/1/2027	12,465	30,500	42,965	1,077,500
7/1/2027	12,122	-	12,122	1,077,500
1/1/2028	12,122	31,000	43,122	1,046,500
7/1/2028	11,773	-	11,773	1,046,500
1/1/2029	11,773	31,500	43,273	1,015,000
7/1/2029	11,419	-	11,419	1,015,000
1/1/2030	11,419	32,500	43,919	982,500
7/1/2030	11,053	-	11,053	982,500
1/1/2031	11,053	33,000	44,053	949,500
7/1/2031	10,682	-	10,682	949,500
1/1/2032	10,682	34,000	44,682	915,500
7/1/2032	10,299	-	10,299	915,500
1/1/2033	10,299	34,500	44,799	881,000
7/1/2033	9,911	-	9,911	881,000
1/1/2034	9,911	35,500	45,411	845,500
7/1/2034	9,512	-	9,512	845,500
1/1/2035	9,512	36,000	45,512	809,500
7/1/2035	9,107	-	9,107	809,500
1/1/2036	9,107	37,000	46,107	772,500
7/1/2036	8,691	-	8,691	772,500
1/1/2037	8,691	38,000	46,691	734,500
7/1/2037	8,263	-	8,263	734,500
1/1/2038	8,263	38,500	46,763	696,000
7/1/2038	7,830	-	7,830	696,000
1/1/2039	7,830	39,500	47,330	656,500
7/1/2039	7,386	-	7,386	656,500
1/1/2040	7,386	40,500	47,886	616,000
7/1/2040	6,930	-	6,930	616,000

1/1/2041	6,930	41,500	48,430	574,500
7/1/2041	6,463	-	6,463	574,500
1/1/2042	6,463	42,500	48,963	532,000
7/1/2042	5,985	-	5,985	532,000
1/1/2043	5,985	43,000	48,985	489,000
7/1/2043	5,501	-	5,501	489,000
1/1/2044	5,501	44,000	49,501	445,000
7/1/2044	5,006	-	5,006	445,000
1/1/2045	5,006	45,000	50,006	400,000
7/1/2045	4,500	-	4,500	400,000
1/1/2046	4,500	46,000	50,500	354,000
7/1/2046	3,983	-	3,983	354,000
1/1/2047	3,983	47,000	50,983	307,000
7/1/2047	3,454	-	3,454	307,000
1/1/2048	3,454	48,500	51,954	258,500
7/1/2048	2,908	-	2,908	258,500
1/1/2049	2,908	49,500	52,408	209,000
7/1/2049	2,351	-	2,351	209,000
1/1/2050	2,351	50,500	52,851	158,500
7/1/2050	1,783	-	1,783	158,500
1/1/2051	1,783	51,500	53,283	107,000
7/1/2051	1,204	-	1,204	107,000
1/1/2052	1,204	53,000	54,204	54,000
7/1/2052	608		608	54,000
1/1/2053	608	54,000	54,608	-
	696,076	1,400,000	2,096,076	

RD Bond 2018

<u>year</u>	<u>interest</u>	<u>principal</u>	<u>total payment</u>	<u>2,225,000</u>
1/1/2020	22,250	36,000	58,250	2,189,000
7/1/2020	27,363	-	27,363	2,189,000
1/1/2021	27,363	36,500	63,863	2,152,500
7/1/2021	26,906	-	26,906	2,152,500
1/1/2022	26,906	37,500	64,406	2,115,000
7/1/2022	26,438	-	26,438	2,115,000
1/1/2023	26,438	38,500	64,938	2,076,500
7/1/2023	25,956	-	25,956	2,076,500
1/1/2024	25,956	39,500	65,456	2,037,000
7/1/2024	25,463	-	25,463	2,037,000
1/1/2025	25,463	40,500	65,963	1,996,500
7/1/2025	24,956	-	24,956	1,996,500
1/1/2026	24,956	41,500	66,456	1,955,000
7/1/2026	24,438	-	24,438	1,955,000
1/1/2027	24,438	42,500	66,938	1,912,500
7/1/2027	23,906	-	23,906	1,912,500
1/1/2028	23,906	43,500	67,406	1,869,000
7/1/2028	23,363	-	23,363	1,869,000
1/1/2029	23,363	44,500	67,863	1,824,500
7/1/2029	22,806	-	22,806	1,824,500
1/1/2030	22,806	46,000	68,806	1,778,500
7/1/2030	22,231	-	22,231	1,778,500
1/1/2031	22,231	47,000	69,231	1,731,500
7/1/2031	21,644	-	21,644	1,731,500
1/1/2032	21,644	48,000	69,644	1,683,500
7/1/2032	21,044	-	21,044	1,683,500
1/1/2033	21,044	49,500	70,544	1,634,000
7/1/2033	20,425	-	20,425	1,634,000
1/1/2034	20,425	50,500	70,925	1,583,500
7/1/2034	19,794	-	19,794	1,583,500
1/1/2035	19,794	52,000	71,794	1,531,500
7/1/2035	19,144	-	19,144	1,531,500
1/1/2036	19,144	53,000	72,144	1,478,500
7/1/2036	18,481	-	18,481	1,478,500
1/1/2037	18,481	54,500	72,981	1,424,000
7/1/2037	17,800	-	17,800	1,424,000
1/1/2038	17,800	56,000	73,800	1,368,000
7/1/2038	17,100	-	17,100	1,368,000
1/1/2039	17,100	57,000	74,100	1,311,000
7/1/2039	16,388	-	16,388	1,311,000
1/1/2040	16,388	58,500	74,888	1,252,500
7/1/2040	15,656	-	15,656	1,252,500
1/1/2041	15,656	60,000	75,656	1,192,500
7/1/2041	14,906	-	76,406	1,192,500
1/1/2042	14,906	61,500	14,906	1,131,000
7/1/2042	14,138	-	77,138	1,131,000
1/1/2043	14,138	63,000	14,138	1,068,000
7/1/2043	13,350	-	77,850	1,068,000
1/1/2044	13,350	64,500	13,350	1,003,500
7/1/2044	12,544	-	79,044	1,003,500
1/1/2045	12,544	66,500	12,544	937,000

7/1/2045	11,713	-	79,713	937,000
1/1/2046	11,713	68,000	11,713	869,000
7/1/2046	10,863	-	80,363	869,000
1/1/2047	10,863	69,500	10,863	799,500
7/1/2047	9,994	-	81,494	799,500
1/1/2048	9,994	71,500	9,994	728,000
7/1/2048	9,100	-	82,100	728,000
1/1/2049	9,100	73,000	9,100	655,000
7/1/2049	8,188	-	83,188	655,000
1/1/2050	8,188	75,000	8,188	580,000
7/1/2050	7,250	-	84,250	580,000
1/1/2051	7,250	77,000	7,250	503,000
7/1/2051	6,288	-	85,288	503,000
1/1/2052	6,288	79,000	6,288	424,000
7/1/2052	5,300	-	86,300	424,000
1/1/2053	5,300	81,000	5,300	343,000
7/1/2053	4,288	-	87,288	343,000
1/1/2054	4,288	83,000	4,288	260,000
7/1/2054	3,250	-	88,250	260,000
1/1/2055	3,250	85,000	3,250	175,000
7/1/2055	2,188	-	89,188	175,000
1/1/2056	2,188	87,000	2,188	88,000
7/1/2056	1,100	-	89,100	88,000
1/1/2057	1,100	<u>88,000</u>	1,100	-
	1,213,763	2,225,000	3,438,763	

EXHIBIT E

Western Pulaski County Water District
 Debt Service Coverage

	<u>2017</u>	<u>2018</u>	<u>2019</u>
Operating Revenues	2,921,392	2,999,184	3,385,440
Operating Expenses	<u>2,627,129</u>	<u>2,995,583</u>	<u>2,918,177</u>
Operating Income (Loss)	294,263	3,601	467,263
Add back: Actuarial Pension/OPEB Expense	26,872	226,436	74,307
Add back: Depreciation Expense	<u>440,250</u>	<u>409,689</u>	<u>446,529</u>
	761,385	639,726	988,099
Average Annual Debt Service	397,779	399,078	400,062
Debt Service Coverage Ratio	191%	160%	247%

Rural Development requires debt service coverage ratio of 120%

EXHIBIT F

**Western Pulaski County Water District
Debt Service Coverage**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
Operating Revenues	3,385,440	3,385,440	3,385,440	3,385,440	3,385,440
Operating Expenses	<u>3,020,288</u>	<u>3,110,194</u>	<u>3,184,077</u>	<u>3,234,959</u>	<u>3,286,858</u>
Operating Income (Loss)	365,152	275,246	201,363	150,481	98,582
Add back: Actuarial Pension & OPEB expense	75,000	75,000	75,000	75,000	75,000
Add back: Depreciation Expense	<u>500,000</u>	<u>541,000</u>	<u>565,000</u>	<u>565,000</u>	<u>565,000</u>
	865,152	816,246	766,363	715,481	663,582
Average Annual Debt Service	401,024	398,511	390,868	381,808	372,345
Debt Service Coverage Ratio	216%	205%	196%	187%	178%

Increase in 2020 depreciation due to full year depreciation on plant put in service in Dec 2019
 914 Transmission project \$2,166,335 in service in early 2021, estimated 3/4 of a year depreciation
 Fishing Creek water line replacement \$1,865,000 in service in mid 2021 estimated 1/2 year depreciation

project cost	2,166,335	1,865,000
depreciable life per PSC guidelines	62.5	62.5
annual depreciation	34,661	29,840

operating expenses less depr and actuarial exp	2% inflationary increase
2019	2,397,341
2020	2,445,288
2021	2,494,194
2022	2,544,077
2023	2,594,959
2024	2,646,858

EXHIBIT G

		existing	Not yet finalized				
	interest	principal	annual debt service	KIA \$1,146,000	KIA \$3,304,000	Total Debt Service	Average Annual Debt Service
2017	156,035.00	186,000.00	342,035.00	-	3,780	345,815	397,779
2018	151,308.00	192,500.00	343,808.00	-	16,918	360,726	399,078
2019	146,063.00	196,500.00	342,563.00	-	20,951	363,514	400,062
2020	189,403.00	238,500.00	427,903.00	-	66,080	493,983	401,024
2021	187,559.00	247,000.00	434,559.00	34,415	204,681	673,655	398,511
2022	179,884.00	255,000.00	434,884.00	68,755	204,331	707,970	390,868
2023	171,934.00	259,000.00	430,934.00	68,655	203,975	703,564	381,808
2024	163,886.00	266,500.00	430,386.00	68,553	203,613	702,552	372,345
2025	155,558.00	281,500.00	437,058.00	68,450	203,245	708,753	362,339
2026	146,794.00	168,500.00	315,294.00	68,345	202,869	586,508	351,513
2027	141,589.00	174,000.00	315,589.00	68,239	202,488	586,316	343,933
2028	136,219.00	178,000.00	314,219.00	68,131	202,100	584,450	335,853
2029	130,734.00	186,000.00	316,734.00	68,021	201,704	586,459	327,281
2030	124,873.00	192,000.00	316,873.00	67,910	201,302	586,085	318,025
2031	118,856.00	195,500.00	314,356.00	67,797	200,893	583,046	308,096
2032	112,645.00	206,000.00	318,645.00	67,683	200,477	586,805	297,521
2033	106,090.00	210,500.00	316,590.00	67,566	200,053	584,209	285,950
2034	99,308.00	216,500.00	315,808.00	67,448	199,622	582,878	273,523
2035	92,295.00	225,000.00	317,295.00	67,328	199,183	583,806	260,072
2036	84,926.00	176,500.00	261,426.00	67,207	198,737	527,370	245,357
2037	79,431.00	180,000.00	259,431.00	67,083	198,283	524,797	231,928
2038	73,774.00	186,500.00	260,274.00	66,958	197,821	525,053	217,285
2039	67,896.00	192,500.00	260,396.00	66,830	197,350	524,576	201,086
2040	61,806.00	199,000.00	260,806.00	66,701	196,871	524,378	183,115
2041	55,504.00	205,000.00	260,504.00	33,302	-	293,806	163,040
2042	48,990.00	211,500.00	260,490.00	-	-	260,490	154,867
2043	44,042.00	138,500.00	182,542.00	-	-	182,542	147,826
2044	40,733.00	141,500.00	182,233.00	-	-	182,233	145,346
2045	37,340.00	145,500.00	182,840.00	-	-	182,840	142,509
2046	33,859.00	149,000.00	182,859.00	-	-	182,859	139,148
2047	30,295.00	152,500.00	182,795.00	-	-	182,795	135,174
2048	26,637.00	157,000.00	183,637.00	-	-	183,637	130,412
2049	22,929.00	156,500.00	179,429.00	-	-	179,429	124,498
2050	19,572.00	125,500.00	145,072.00	-	-	145,072	117,632
2051	16,524.00	128,500.00	145,024.00	-	-	145,024	113,712
2052	13,399.00	132,000.00	145,399.00	-	-	145,399	108,493
2053	10,195.00	135,000.00	145,195.00	-	-	145,195	101,112
2054	7,538.00	83,000.00	90,538.00	-	-	90,538	90,091
2055	5,438.00	85,000.00	90,438.00	-	-	90,438	89,942
2056	3,288.00	87,000.00	90,288.00	-	-	90,288	89,694
2057	1,100.00	88,000.00	89,100.00	-	-	89,100	89,100
	3,924,565.00	7,818,500.00	10,826,249.00	1,355,377.00	4,127,326.80		

EXHIBIT H

Filed Separately Due to file size

EXHIBIT I

Client: 75511 - Western Pulaski County Water District
 Engagement: Western Pulaski County Water District
 Period Ending: 12/31/2019
 Trial Balance: Trial Balance

Account	Description	2nd PP-Adj	1st PP-Adj	UNADJ	JE Ref #	AJE	ADJ
		12/31/2017	12/31/2018	12/31/2019		12/31/2019	
10103	LAND AND LAND RIGHTS	494,937.90	494,937.90	494,937.90		494,937.90	
10105	DISTRIBUTION RESERVOIRS	46,476.60	199,576.60	199,576.60		199,576.60	
10110	WEST 80 PUMP STATION	137,852.74	137,852.74	137,852.74		137,852.74	
10111	ELECTRIC PUMPING PLANT	30,801.63	30,801.63	30,801.63		30,801.63	
10112	CLIFTY ROAD PUMP STATION	90,625.00	90,625.00	90,625.00		90,625.00	
10113	NELSON KNOB PUM STATION	13,000.00	13,000.00	13,000.00		13,000.00	
10114	NANCY WATER TANK	240,602.96	240,602.96	240,602.96		240,602.96	
10115	HWY 80 PUMP STATION	20,250.00	20,250.00	20,250.00		580,909.00	601,159.00
10116	NEW OFFICE BUILDING	250,137.51	250,137.51	250,687.51	AJE - 23	580,909.00	
					AJE - 6	(550.00)	250,137.51
10117	HICKORY NUT TANK & EXTN	879,246.36	1,063,370.89	1,063,370.89		1,063,370.89	
10119	LINE EXTENSION - 2016	28,550.00	28,550.00	28,550.00		28,550.00	
10120	LINE EXTENSION - 2002-2005	4,478,691.75	4,478,691.75	4,478,691.75		4,478,691.75	
10121	LINE EXTENSION - 2006	123,288.81	123,288.81	123,288.81		123,288.81	
10122	LINE EXTENSION - 2007	385,549.89	385,549.89	385,549.89		385,549.89	
10123	LINE CONSTRUCTION - 2008	264,994.90	264,994.90	264,994.90		264,994.90	
10124	LINE CONSTRUCTION - 2009	138,566.52	138,566.52	138,566.52		138,566.52	
10125	LINE EXTENSION - 2010	2,103,789.77	2,103,789.77	2,103,789.77		2,103,789.77	
10126	LINE EXTENSION - 2011	325,679.90	325,679.90	325,679.90		325,679.90	
10127	LINE EXTENSION - 2012	43,567.08	43,567.08	43,567.08		43,567.08	
10128	LINE EXTENSION - 2013	367,465.78	367,465.78	367,465.78		367,465.78	
10129	LINE EXTENSION - 2014	961,039.71	961,039.71	961,039.71		961,039.71	
10130	LINE EXTENSION 2015	576,417.82	576,417.82	576,417.82		576,417.82	
10131	TRANSMISSION & DIST MAINS	6,799,767.88	6,799,767.88	6,799,767.88		6,799,767.88	
10133	SERVICES	568,482.42	568,482.42	568,482.42		568,482.42	
10134	METERS & INSTALLATION	2,366,189.15	2,476,327.15	2,476,327.15		280,443.00	2,756,770.15
					AJE - 20	309,043.00	
					AJE - 20	(28,600.00)	
10135	HYDRANTS	20,147.47	20,147.47	20,147.47		20,147.47	
10136	STEEL BUILDING	112,080.00	112,080.00	112,080.00		112,080.00	
10137	CONCRETE FLOOR-GARAGE	0.00	0.00	0.00		0.00	
10138	BUILDING #3	60,614.16	60,614.16	60,614.16		60,614.16	
10139	HEAT PUMP - BACK LOT	5,435.41	5,435.41	5,435.41		5,435.41	
10140	OFFICE EQUIPMENT	207,799.64	207,799.64	223,147.03		(3,512.85)	219,634.18
10141	TRUCKS	292,028.06	395,430.56	413,230.56	AJE - 7	(3,512.85)	413,230.56
10142	RADIOS	9,106.00	9,106.00	9,106.00		9,106.00	
10143	TRAILER FOR BACKHOE	9,900.00	9,900.00	11,100.00		(1,200.00)	9,900.00
					AJE - 7	(1,200.00)	
10145	EQUIPMENT & TOOLS	57,249.60	74,814.70	74,814.70		74,814.70	
10146	FENCE	5,492.88	5,492.88	5,492.88		5,492.88	
10150	Bond Issuance Costs	0.00	0.00	0.00		0.00	
10151	LINE EXTENSION - 2016	115,805.85	115,805.85	115,805.85		115,805.85	
10152	ASPHALT PARKING LOT	55,000.00	55,000.00	55,000.00		55,000.00	
10153	LINE CONSTRUCTION-2017	0.00	0.00	0.00		0.00	
10154	LINE EXTENSION 2018	0.00	806,004.83	806,004.83		(806,004.83)	0.00
10155	LINE EXTENSION - 2019	0.00	0.00	3,663,596.82	AJE - 23	(806,004.83)	
					AJE - 8	(2,054,241.96)	1,609,354.86
					AJE - 10	(196,457.00)	
					AJE - 11	(2,095,531.35)	
					AJE - 16	17,100.00	
					AJE - 17	(3,102.33)	
					AJE - 22	(2,250.00)	
					AJE - 23	902.89	
						225,095.83	
10810	ACCUM DEPR-DIST RESERVOIR	(46,477.00)	(52,952.00)	(53,012.00)		(26,973.00)	(79,985.00)
10815	ACCUM DEPR-PUMPING PLANT	(189,946.93)	(211,164.84)	(237,149.88)	AJE - 24	(26,973.00)	(236,616.88)
					AJE - 24	533.00	
						533.00	
10816	ACCUM DEP - CLIFTY P/S	(51,012.20)	(56,450.16)	(60,075.12)			(60,075.12)
10818	ACCUM DEPR - LINE EXTENSION	(2,509,388.78)	(2,646,312.62)	(2,925,211.58)			(2,925,211.58)
10820	ACCUM DEPR-TRN/DIST MAINS	(4,087,581.33)	(4,218,328.00)	(4,361,430.04)		152,444.00	(4,208,986.04)
					AJE - 24	152,444.00	
10825	ACCUM DEPR - SERVICES	(491,008.25)	(505,220.00)	(527,959.04)		8,527.00	(519,432.04)
					AJE - 24	8,527.00	
10830	ACCUM DEPR - METERS/INSTLN	(1,481,603.00)	(1,502,597.04)	(1,590,634.08)		51,581.00	(1,539,053.08)
					AJE - 20	28,600.00	

Account	Description	2nd PP-Adj	1st PP-Adj	UNADJ	JE Ref #	AJE	ADJ
		12/31/2017	12/31/2018	12/31/2019		12/31/2019	
10835	ACCUM DEPR - HYDRANTS	(20,146.64)	(20,146.64)	(20,146.64)	AJE - 24	22,981.00	(20,146.64)
10840	ACCUM DEPR - OFFICE EQUIP	(201,315.88)	(202,885.00)	(209,266.96)	AJE - 24	4,278.00	(204,988.96)
10841	ACCUM DERP- OFFICE BLDG	(36,226.97)	(51,383.01)	(75,629.01)	AJE - 24	4,278.00	(66,539.01)
10842	ACCUM DEPR - EQUIPMENT	(50,766.28)	(56,033.00)	(84,362.96)	AJE - 24	9,090.00	(59,590.96)
10845	ACCUM DEPR - TRUCKS	(270,467.16)	(279,983.12)	(288,578.12)	AJE - 24	24,772.00	(300,759.12)
10846	ACCUM DEPR - TRAILERS	(8,397.00)	(11,521.00)	(11,521.00)	AJE - 24	0.00	(11,521.00)
10850	ACCUM DEPR - RADIOS	(9,106.00)	(9,106.00)	(9,106.00)	AJE - 24	0.00	(9,106.00)
13110	PETTY CASH	200.00	200.00	200.00	AJE - 24	0.00	200.00
13111	CASH ON HAND - DRAWER	842.50	842.50	842.50	AJE - 24	0.00	842.50
13123	CNB - #75085467 BOND & INT	133,801.09	136,527.93	179,940.08	AJE - 24	0.00	179,940.08
13126	DEPOSIT ACCT - CNB - #75117465	216,728.68	238,247.39	256,177.50	AJE - 24	0.00	256,177.50
13127	CNB #75120891 OPERATING	1,751,275.67	655,077.53	1,087,903.11	AJE - 24	0.00	1,087,903.11
13128	CNB #75120904 REVENUE FD	66,140.98	140,426.27	73,597.73	AJE - 24	0.00	73,597.73
13129	CD #946310 CNB	0.00	1,002,495.21	1,000,000.00	AJE - 24	3,345.26	1,003,345.26
13201	MBC - LINE EXTE #422975	2,994.71	0.00	0.00	AJE - 25	0.00	0.00
13205	MBC - PRIME INVEST - #510270	0.00	0.00	0.00	AJE - 25	0.00	0.00
13501	MBC - CD #7100045213	0.00	0.00	0.00	AJE - 25	0.00	0.00
13504	CVNB - CD #14201429	0.00	0.00	0.00	AJE - 25	0.00	0.00
13705	MBC #336491-MONEY MARKET	0.00	0.00	0.00	AJE - 25	0.00	0.00
13707	MBC # 538671	0.00	0.00	0.00	AJE - 25	0.00	0.00
13708	CNB - #75117908 DEBT RESERVE	45,185.46	54,690.51	64,200.33	AJE - 25	0.00	64,200.33
13709	CNB - SH.LIVED ASSET #75117916	323,714.70	347,353.16	363,011.04	AJE - 25	0.00	363,011.04
13711	SINKING ACC REGIONS BANK	93,198.57	92,648.40	95,416.44	AJE - 25	0.00	95,416.44
13712	DEBT SERVICE ACCT-REGIONS	0.00	0.00	0.00	AJE - 25	0.00	0.00
14100	ACCOUNTS RECEIVABLE	33,445.63	23,753.02	90,470.04	AJE - 1	(78,712.85)	11,757.19
14101	ACCTS REC - UNBILLED	325,152.20	344,778.30	252,150.30	AJE - 1	118,005.89	370,156.19
					AJE - 16	78,712.85	
					AJE - 16	39,293.04	
14102	ACC REC RETURN CHECKS	2,174.69	2,815.93	3,785.36	AJE - 1	0.00	3,785.36
16200	PREPAID INSURANCE	8,230.31	7,647.53	9,308.74	AJE - 1	0.00	9,308.74
16300	BOND ISSUANCE COST	0.00	0.00	0.00	AJE - 1	0.00	0.00
17000	INVENTORY	24,000.00	127,270.64	101,935.00	AJE - 21	(11,599.36)	90,335.64
18000	DEFERRED OUTFLOWS	186,751.00	326,980.00	326,980.00	AJE - 12	(92,011.00)	234,969.00
					AJE - 13	(86,417.00)	
					AJE - 13	(5,594.00)	
21400	APPROPD RETAINED EARNINGS	(136,729.91)	(136,729.91)	(136,729.91)	AJE - 15	0.00	(136,729.91)
21500	UNAPP. RETAINED EARNINGS	1,619,630.57	1,595,095.30	1,655,955.72	AJE - 15	0.00	1,655,955.72
22001	BONDS PAYABLE - RD - 2001A	0.00	0.00	0.00	AJE - 15	0.00	0.00
22002	BONDS - RD - 2001B	0.00	0.00	0.00	AJE - 15	0.00	0.00
22003	LOAN PAYABLE - RD - 2002A	(740,000.00)	(724,000.00)	(706,000.00)	AJE - 15	0.00	(706,000.00)
22004	BONDS PAYABLE - RD - 2002B	(450,000.00)	(440,000.00)	(429,000.00)	AJE - 15	0.00	(429,000.00)
22020	WATER REVENUE BONDS - 2010	(821,500.00)	(805,000.00)	(788,000.00)	AJE - 15	0.00	(788,000.00)
22021	LOAN PAY KRWFC	(1,555,000.00)	(1,430,000.00)	(1,281,583.75)	AJE - 15	(23,416.25)	(1,305,000.00)
					AJE - 15	(23,416.25)	
22022	LOAN PAYABLE-RD #11 2015	(1,352,500.00)	(1,327,500.00)	(1,302,000.00)	AJE - 15	0.00	(1,302,000.00)
22024	NOTE PAYABLE RD 2013	0.00	0.00	0.00	AJE - 15	0.00	0.00
22025	LOAN PAYABLE-KIA	(705,997.80)	(1,042,672.89)	(943,643.85)	AJE - 15	(99,029.24)	(1,042,672.89)
					AJE - 15	(99,029.24)	
22026	NOTE PAYABLE CNB	0.00	(754,055.99)	(769,919.84)	AJE - 3	769,919.84	0.00
					AJE - 3	(1,305,987.47)	
					AJE - 10	2,095,531.35	
					AJE - 16	(18,721.15)	
					AJE - 22	(902.89)	
22027	LOAN PAYABLE-RD#13 8/8/19	0.00	0.00	(2,225,000.00)	AJE - 18	0.00	(2,225,000.00)
22200	ACCRUED INTEREST - BONDS	(78,536.10)	(75,807.00)	(66,746.04)	AJE - 18	(27,249.00)	(93,995.04)
					AJE - 18	(27,249.00)	
22501	CUSTOMER DEPOSITS	0.00	0.00	0.00	AJE - 18	0.00	0.00
22709	SALES TAX PAYABLE	0.00	0.00	0.00	AJE - 18	0.00	0.00
23100	ACCOUNTS PAYABLE	(127,097.87)	(162,695.10)	(134,220.85)	AJE - 14	(7,881.20)	(142,102.05)
23105	CONSTRUCTION AP	(163,968.56)	(196,457.00)	0.00	AJE - 14	(7,881.20)	0.00
23106	CONSTRUCTION ACCT PAY	0.00	0.00	(196,457.00)	AJE - 8	196,457.00	0.00
					AJE - 8	196,457.00	

Account	Description	2nd PP-Adj	1st PP-Adj	UNADJ	JE Ref #	AJE	ADJ
		12/31/2017	12/31/2018	12/31/2019		12/31/2019	
23110	PAYABLE TANK SITE SETTLEMENT	0.00	0.00	0.00			0.00
23120	CONSTRUCTION ACCOUNTS PAYABLE	0.00	0.00	0.00			0.00
23500	CUSTOMER DEPOSITS	(216,192.17)	(237,022.97)	(254,556.50)			(254,556.50)
23598	HEALTH INSURANCE W/H	0.00	0.00	0.00			0.00
23599	OTHER W/H	0.00	(1,190.64)	(2,711.66)			(2,711.66)
23600	RETIREMENT WITHHOLDING	(6,061.01)	(7,968.16)	(1,572.76)		(6,668.63)	(8,241.39)
					AJE - 5	(6,668.63)	
23604	KY TAX W/H	(1,224.69)	(1,555.59)	(1,541.17)			(1,541.17)
23605	PULASKI CO TAX W/H	(933.86)	(1,012.20)	(1,099.51)			(1,099.51)
23606	SCHOOL TAX PAY - PULASKI	(6,711.25)	(6,665.76)	(7,763.68)			(7,763.68)
23709	SALES TAX PAYABLE	(701.26)	(733.05)	(931.18)			(931.18)
23710	PAYBACKS - CURRENT	(4,581.94)	(4,581.94)	(2,536.81)		634.83	(1,901.98)
					AJE - 6	634.83	
24000	NET PENSION LIABILITY	(594,353.00)	(843,637.00)	(843,637.00)		21,080.00	(822,557.00)
24050	NET OPEB LIABILITY	0.00	(289,751.00)	(289,751.00)	AJE - 12	21,080.00	
24100	DEFERRED INFLOWS	(40,456.00)	(95,358.00)	(95,358.00)	AJE - 13	49,955.00	(239,796.00)
					AJE - 12	49,955.00	
					AJE - 13	(11,105.00)	
24200	ACCRUED VACATION	(13,507.50)	(11,537.50)	(11,537.50)	AJE - 19	(42,226.00)	
					AJE - 19	(6,805.00)	
24300	ACCRUED COMP TIME	(6,955.13)	(6,822.85)	(6,822.85)	AJE - 19	(6,805.00)	(18,342.50)
					AJE - 19	(323.25)	
25200	CUST. ADVANCES FOR CONST	(592,780.54)	(592,780.54)	(592,695.71)	AJE - 6	(84.83)	(592,780.54)
					AJE - 6	(84.83)	
27100	TAP-ON-FEES -CUSTOMERS	(3,089,716.49)	(3,089,716.49)	(3,204,451.49)	AJE - 2	114,735.00	(3,089,716.49)
					AJE - 2	114,735.00	
27101	FEDERAL GRANTS IN AID OF CONST.	(2,591,181.17)	(2,591,181.17)	(2,591,181.17)			(2,591,181.17)
27103	FEDERAL GRANTS IN AID OF CONST. - PH	(115,463.98)	(115,463.98)	(115,463.98)			(115,463.98)
27104	FUNDS RECEIVED - NEW LINE	(3,430,950.96)	(3,430,950.96)	(3,430,950.96)			(3,430,950.96)
27105	COMM OF KY - HIGHWAY PROJTS	(85,612.92)	(85,612.92)	(85,612.92)			(85,612.92)
27106	FUNDS RECEIVED - PUMP STA	(166,721.28)	(166,721.28)	(166,721.28)			(166,721.28)
27107	FUNDS RECEIVED - KY FINANCE	(571,826.92)	(571,826.92)	(571,826.92)			(571,826.92)
27109	FUNDS RECEIVED - REIMB INTEREST US TREAS.	(3,587.06)	(3,587.06)	(3,587.06)			(3,587.06)
27111	FUNDS RECEIVED - RURAL DELP	(143,997.85)	(143,997.85)	(1,559,754.84)		1,415,756.99	(143,997.85)
					AJE - 3	1,415,756.99	
27113	FUNDS REC'D-KY INFRASTRUC	0.00	0.00	(79,381.72)	AJE - 4	79,381.72	0.00
					AJE - 4	79,381.72	
46101	SALES - RESIDENTIAL	(2,664,615.84)	(2,721,381.49)	(3,068,020.08)	AJE - 1	(12,630.68)	(3,080,650.76)
					AJE - 1	(12,630.68)	
46102	SALES - COMMERCIAL	(165,145.33)	(162,404.16)	(196,758.03)			(196,758.03)
46150	PENALTIES - LATE PAYMENTS	(41,969.72)	(48,819.44)	(52,313.63)			(52,313.63)
47100	SERVICE CHARGES	(27,025.00)	(32,586.85)	(29,875.00)			(29,875.00)
47101	MISC REV - REPAIR CHARGES	(2,349.62)	(3,283.92)	(3,980.81)			(3,980.81)
47102	MISC REV - RECONNECTS	(15,495.00)	(16,450.00)	(13,825.00)			(13,825.00)
47103	RENTAL INCOME-CELL TOWER	0.00	0.00	0.00			0.00
47104	MISC INCOME	(1,384.51)	(6,600.49)	(1,935.29)			(1,935.29)
60101	WAGES - TRANS & DIST	204,351.13	222,059.73	284,673.18		(124,905.13)	159,768.05
					AJE - 19	5,954.87	
					AJE - 20	(130,860.00)	
60102	WAGES - CUSTOMER ACCTS	118,709.76	122,623.37	130,181.29	AJE - 19	1,173.38	131,354.87
					AJE - 19	1,173.38	
60103	WAGES - ADMIN & GENERAL	0.00	0.00	0.00			0.00
60401	RETIREMENT EXPENSE	65,342.44	69,455.31	78,337.79	AJE - 5	6,668.63	85,006.42
60402	ACTUARIAL PENSION EXP	26,872.00	226,436.00	0.00		74,307.00	74,307.00
					AJE - 12	76,442.00	
					AJE - 13	(2,135.00)	
61001	PURCHASED WATER	1,202,273.77	1,321,510.19	1,356,514.43			1,356,514.43
61505	ELECTRICITY FOR PUMPING	68,814.60	76,532.15	66,962.05			66,962.05
62002	OFFICE SUPPLIES & EXPENSE	27,588.65	30,407.37	27,678.76			27,678.76
62003	POSTAGE	30,320.66	32,760.19	32,621.67			32,621.67
62005	TRANS & DIST - MAINTENANCE	18,872.36	15,045.37	51,396.16		(10,137.15)	41,259.01
					AJE - 7	4,712.85	
					AJE - 11	(17,100.00)	
					AJE - 17	2,250.00	
62006	TRANS & DIST - OPER EXP & SUPPLIES	44,787.97	29,769.15	231,150.57		(166,583.64)	64,566.93
					AJE - 20	(178,183.00)	
					AJE - 21	11,599.36	
62007	TRANS & DIST - MAINTENANCE	0.00	0.00	0.00			0.00
63100	CONTRACT SERVICE - ENGINEERING	1,500.00	1,000.00	3,625.00			3,625.00

Account	Description	2nd PP-Adj	1st PP-Adj	UNADJ	JE Ref #	AJE	ADJ
		12/31/2017	12/31/2018	12/31/2019		12/31/2019	
63201	CONTRACT SERV - ACCOUNTING	14,000.00	15,600.00	14,600.00			14,600.00
63202	CONTRACT SERV - AUDIT	16,500.00	18,000.00	18,500.00			18,500.00
63300	CONTRACT SERV - LEGAL	3,517.94	4,178.45	2,745.50			2,745.50
63501	CONTRACT SERV - ANALYSIS	9,372.50	26,525.00	16,122.00			16,122.00
63502	METER READING SERVICE	99,172.05	99,872.45	92,563.49		7,881.20	100,444.69
					AJE - 14	7,881.20	
63504	CONTRACT SERVICES-OTHER	825.00	3,300.00	495.00			495.00
63505	EQUIPMENT LEASE - BACKHOE	0.00	0.00	0.00			0.00
64100	RENT - BUILDING	0.00	0.00	0.00			0.00
64200	RENT - EQUIPMENT	0.00	0.00	0.00			0.00
65000	VEHICLE EXPENSE	19,663.01	25,136.98	23,345.68			23,345.68
65001	BACKHOE/DUMP TRK EXPENSES	1,852.23	4,500.07	2,464.00			2,464.00
65600	VEHICLE INSURANCE	0.00	2,939.54	2,141.16			2,141.16
65700	GENERAL LIAB INSURANCE	37,279.87	37,698.42	36,855.14			36,855.14
65801	INSURANCE - WORKERS COMP	6,881.08	6,936.40	7,006.96			7,006.96
65900	FIDELITY BONDS	5,242.70	7,914.95	7,886.34			7,886.34
65901	EMPLOYEE HEALTH INSURANCE	73,052.73	74,883.34	86,197.47			86,197.47
65902	ACCIDENT INS - EMPLOYEE	0.00	0.00	0.00			0.00
66000	ADVERTISING - NEWSPAPERS	2,389.93	2,117.00	1,518.35			1,518.35
67000	BAD DEBTS	10,619.48	11,566.00	0.00		12,630.68	12,630.68
					AJE - 1	12,630.68	
67503	UTILITIES	1,401.68	540.94	1,990.31			1,990.31
67504	TELEPHONE	11,001.52	11,898.14	8,689.72			8,689.72
67505	OTHER EXPENSES	3,601.02	17,441.99	3,603.42			3,603.42
67506	ADMIN & GENERAL - MISC	5,039.72	7,226.32	11,824.71			11,824.71
67508	REFUNDS	4,684.04	879.37	1,291.33			1,291.33
67510	TRAVEL EXPENSES	2,193.57	2,537.70	2,936.08			2,936.08
67515	DIRECTORS' FEES	12,200.00	12,400.00	12,000.00			12,000.00
67530	RENTAL UNIFORMS	4,148.23	5,250.35	10,992.79			10,992.79
67531	MEMBERSHIP DUES	2,250.00	2,400.00	3,701.00			3,701.00
71500	CELL TOWER RENTAL - TANK	(42,112.60)	(23,469.78)	(15,480.00)			(15,480.00)
71900	INTEREST INCOME	(1,575.98)	(4,617.88)	(11,182.72)		(3,345.26)	(14,527.98)
					AJE - 25	(3,345.26)	
72000	IRS - REIMB BOND INTEREST	0.00	(2,960.41)	0.00			0.00
72100	BAD DEBT RECOVERY	(5,214.47)	(6,462.38)	(4,519.74)			(4,519.74)
72102	COMMISSION ON SALES TAX	0.00	0.00	0.00			0.00
72110	MANAGEMENT FEE INCOME	0.00	0.00	0.00			0.00
75000	SERVICE CHGS- RETURNED CKS	(2,200.00)	(1,925.00)	(2,250.00)			(2,250.00)
75500	MISC INCOME	(675.95)	(170.06)	(622.49)			(622.49)
80812	PAYROLL TAXES	29,210.29	30,784.24	33,423.16			33,423.16
80813	TAXES & LICENSES	0.00	0.00	0.00			0.00
80814	PSC ASSESSMENT	6,030.13	5,842.78	5,866.40			5,866.40
80815	PROPERTY TAXES	0.00	0.00	0.00			0.00
82600	DEPRECIATION EXPENSE	440,249.78	409,689.01	630,000.00		(183,471.00)	446,529.00
					AJE - 24	(183,471.00)	
82601	AMORTIZATION BOND ISSUANCE COSTS	0.00	0.00	0.00			0.00
82703	INTEREST - LONG TERM DEBT	156,034.91	147,434.20	122,454.84		62,747.18	185,202.02
					AJE - 4	20,950.86	
					AJE - 15	23,416.25	
					AJE - 16	(8,868.93)	
					AJE - 18	27,249.00	
82704	US BANK LOAN SERVICE FEE	0.00	1,144.61	1,303.34		(1,303.34)	0.00
82705	INTEREST EXP - CITIZENS	0.00	0.00	8,600.63		AJE - 4	(1,303.34)
					AJE - 16	(8,600.63)	0.00
85000	VOIDED CHECKS	0.00	(322.12)	0.00			0.00
85500	LAWSUIT SETTLEMENT PAID	0.00	0.00	0.00			0.00
85600	BOND UNDERWRITING EXPENSE	0.00	0.00	0.00			0.00
85700	BOND INSURANCE EXPENSE	0.00	0.00	0.00			0.00
85800	REOFFERING PREMIUM LOAN	0.00	0.00	0.00			0.00
85900	TRUSTEE FEES REGIONS BK	0.00	0.00	0.00			0.00
90000	Tap Fees	(69,890.00)	(51,922.68)	0.00		(114,735.00)	(114,735.00)
					AJE - 2	(114,735.00)	
91000	KIA Grant Rev	0.00	0.00	0.00			0.00
92000	RD Grant Revenue	0.00	0.00	0.00		(109,769.52)	(109,769.52)
					AJE - 3	(109,769.52)	
93000	Misc.	0.00	0.00	0.00			0.00
94000	Other Construction Funds	0.00	0.00	0.00			0.00
999	Undistributed	0.00	0.00	0.00			0.00
Total							
Net (Income) Loss		60,860.42	33,496.93				