

KENTUCKY GUIDE 7  
MAY 1998

**SUMMARY ADDENDUM**  
**TO**  
**PRELIMINARY ENGINEERING REPORT**

**DATED: April 2019,**  
**Revision No. 1 February 2020,**  
**Revision No. 2 April 2020**  
**Revision No. 3 May 2020**

**FOR**

**GRAYSON COUNTY WATER DISTRICT – East/West Interconnect Project Phase 1**

**APPLICANT CONTACT PERSON – Kevin Shaw, Manager**

**APPLICANT PHONE NUMBER – 270-259-2917**

**APPLICANT TAX IDENTIFICATION NUMBER (TIN) - 61-1038814**

***ITEMS IN BOLD ITALIC PRINT ARE APPLICABLE TO SEWER SYSTEMS.***

In order to avoid unnecessary delays in application processing, the applicant and its consulting engineer should prepare a summary of the preliminary report in accordance with this Guide.

Please complete the applicable sections of the Summary Addendum. *Please note, if water and sewer revenue will both be taken as security for the loan, all user information and characteristics of both utility systems will be needed even though the project will benefit only one utility.*

Feasibility review and grant determinations may be processed more accurately and more rapidly if the Summary/Addendum is submitted simultaneously with the preliminary engineering report, or as soon thereafter as possible.

General

A. Proposed Project: Provide a brief description of the proposed project. In addition to this summary, the applicant/engineer should submit a project map of the service area.

This project will connect three areas of the District's system in order to be fed by the District's WTP. Currently they are fed via an interconnect with Leitchfield Utilities. The areas included are Peter Cave, Lilac and KY 259 South. This project will also include the installation of two master meters.

***I. FACILITY CHARACTERISTICS OF EXISTING SEWER SYSTEM - This section is not applicable since Grayson County Water District does not provide sewer service.***

***A. Sewage Treatment:***

***1. Type:***

***2. Method of Sludge Disposal:***

***3. Cost per 1,000 gallons if sewage treatment is contracted:***

***4. Date Constructed:***

***B. Treatment Capacity of Sewage Treatment Plant:***

***C. Type of Sewage Collector System (Describe):***

***D. Number and Capacity of Sewage Lift Stations:***

***E. Sewage Collection System:***

***Lineal Feet of Collector Lines, by size: 6" \_\_\_\_\_ 8" \_\_\_\_\_  
10" \_\_\_\_\_ 12" \_\_\_\_\_ Larger***

***Date(s) Constructed:***

***Conditions of Existing System. Briefly describe the conditions and suitability for continued use of facilities now owned by the applicant. Include any major renovation that will be needed within five to ten years. NOT APPLICABLE***

II. FACILITY CHARACTERISTICS OF EXISTING WATER SYSTEM

- A. Water Source: Describe adequacy of source (quality and quantity). Include an explanation of raw water source, raw water intake structure, treatment plant capacity, and current level of production (WTP). Also describe the adequacy of Water Purchase Contract if applicable.

The GCWD system was originally designed to purchase all its water from the City of Leitchfield. Numerous water line extensions and infrastructure projects over the past 40 years have established the current GCWD customer base which is approximately 98% of the county. The District has its own water treatment plant with a capacity of 2.1 MGD. The District purchases an average of 550,000 to 900,000 gallons a day from Leitchfield Utilities. However, recent water quality issues with the purchased water have been unacceptable and has forced the District to investigate the option of providing all areas of its distribution system with water from its water treatment plant. This project will allow the District to do just that.

If the applicant purchases water:

Seller(s):

1. Leitchfield Utilities

Price/1,000 gallons: \$2.297/1000 gallons

Present Estimated Market Value of Existing System: \$18.9m

- B. Water Storage:

Type:      Ground Storage Tank       Elevated Tank   
                 Standpipe    Other

Number of Storage Structures    Eight (8)

Total Storage Volume Capacity      2,166,000 gallons

Date Storage Tank(s) Constructed:    1982 through 2006

- C. Water Distribution System:

Pipe Material    PVC

Lineal Feet of Pipe:	3" Diameter	6.8 miles	4"	350.1 miles
	6"	160.4 miles	8"	28.4 miles
	10"	5 miles	12"	7.8 miles
	16"	3.9 miles		

Date(s) Water Lines Constructed      1974 & after

Number and Capacity of Pump Station(s) – 7 stations ranging in size from 20 GPM to 300 GPM. 3 of the pump stations are out of service.

D. Condition of Existing Water System:

Briefly describe the condition and suitability for continued use of facility now owned by the applicant. Include any major renovation that will be needed within five to ten years.

The system is in excellent shape. This project will address most of the system weaknesses outside of normal maintenance. There is a part of the distribution system that was constructed in 1972 that will need to be evaluated for soundness within the next five to 10 years. At present there are no obvious issues with this area.

E. Percentage of Water Loss Existing System:      8.97 percent (2018 PSC Report)

III. EXISTING LONG-TERM INDEBTEDNESS

A. List of Bonds and Notes:

DATE OF ISSUE	BOND HOLDER	PRINCIPAL BALANCE	PAYMENT DATE	BOND TYPE <sup>1</sup> WATER/SEWER		AMOUNT ON DEPOSIT IN RESERVE ACCOUNT
2002	KIA	\$902,706	June/Dec	100%		\$981,328
2005	RD	\$1,155,000	July/Jan	100%		
2009	KRW	\$110,000	July/Jan	100%		
2012	KRW	\$2,900,000	July/Jan	100%		
2013A	RD	\$490,000	July/Jan	100%		
2013B	RD	\$834,000	July/Jan	100%		
2013	KRW	\$1,245,000	July/Jan	100%		
2018	RD	\$712,000	July/Jan	100%		

\* If a combined issue, show attributable portion to each system.

B. Principal and Interest Payments: (Begin with Next Fiscal Year Payment)

DATE OF ISSUE	BOND HOLDER	PAYMENT YEAR: 2020		PAYMENT YEAR: 2021		PAYMENT YEAR: 2022	
		PRINCIPAL PAYMENT	INTEREST PAYMENT	PRINCIPAL PAYMENT	INTEREST PAYMENT	PRINCIPAL PAYMENT	INTEREST PAYMENT
2002	KIA	223,618	11,294	227,662	7,250	231,778	3,134
2005	RD	24,000	46,101	25,000	45,190	26,000	44,138
2009	KRW	35,000	2,314	40,000	820	0	0
2012	KRW	150,000	92,714	155,000	88,333	160,000	83,802
2013A	RD	9,500	10,109	10,000	9,898	10,000	9,690
2013B	RD	17,500	16,155	18,000	15,800	18,500	15,435
2013	KRW	140,000	30,252	145,000	26,612	140,000	22,622
2018	RD	11,500	17,382	11,500	17,094	12,000	16,800

C. Existing Short-Term Indebtedness

List of All Short-Term Debts: (Do Not Show Any Debt Listed in Paragraph IV above)

Lendor or Lessor	Date of Issue (Month & Year)	Principal Balance	Purpose (Water and/ or Sewer)	Payment Date	Principal & Interest Payment (P&I)	Date to Be Paid In Full
—NONE—						

IV. LAND AND RIGHTS - EXISTING SYSTEM(S)

Number of Treatment Plant Sites:	Water - 1	<i>Sewer</i>
Number of Storage Tank Sites:	Water - 8	<i>Sewer</i>
Number of Pump Stations:	Water - 7	<i>Sewer</i>
Total Acreage:	Water -	<i>Sewer</i>
Purchase Price:	Water \$	<i>Sewer \$</i>

V. NUMBER OF EXISTING USERS

	Water	<i>Sewer</i>
Residential (In Town)*	6,380	
Residential (Out of Town)*		
Non-Residential (In Town)	381	
Non-Residential (Out of Town) - wholesale customer -	1	
Total		

Number of Total Potential Users Living in the Service Area 380 approximately

\*Note: Residential Users: Classify by type of user regardless of quantity of water used. This classification should include those meters serving individual rural residence.

VI. CURRENT WATER AND SEWER CONNECTION FEES FOR EACH SIZE WATER METER CONNECTION

<u>Meter Size</u>	<u>Water Connection Fee</u>	<u>Sewer Connection Fee</u>
5/8" x 3/4"	\$550.00	
1 - Inch	Actual Cost of Installation	

VII. SEWER RATES (EXISTING SYSTEM) – NOT APPLICABLE

*Percentage of water bill \_\_\_\_\_%. Minimum Charge \$ \_\_\_\_\_.*

*Other: (Sewer charge if not based on water bill)*

*Date this rate went into effect:*

VIII. WATER RATES EXISTING SYSTEM

Existing Rate Schedule: *See attached page 6A and 6B*

Date This Rate Went into Effect: 07/04/2015 and 2/14/2018

If More Than One Rate Schedule, Please Include All Schedules.

*Analysis of Actual Sewer Usage - Existing System – NA*

FOR Grayson County, Kentucky  
Community, Town or City

P.S.C. KY. NO. \_\_\_\_\_

6<sup>th</sup> REVISED SHEET NO. 4.0 \_\_\_\_\_

Grayson County Water District  
(Name of Utility)

CANCELING P.S.C. KY. NO. \_\_\_\_\_

5<sup>th</sup> REVISED SHEET NO. 4.0 \_\_\_\_\_

RULES AND REGULATIONS

**Monthly Water Rates**

5/8" x 3/4" Meters

First	1,500 gallons	\$18.09 minimum bill
Next	8,500 gallons	8.56 per 1,000 gallons
Next	40,000 gallons	7.69 per 1,000 gallons
Next	100,000 gallons	6.82 per 1,000 gallons
All Over	150,000 gallons	5.98 per 1,000 gallons

3/4" Meters

First	3,000 gallons	\$30.93 minimum bill
Next	7,000 gallons	8.56 per 1,000 gallons
Next	40,000 gallons	7.69 per 1,000 gallons
Next	100,000 gallons	6.82 per 1,000 gallons
All Over	150,000 gallons	5.98 per 1,000 gallons

1" Meters

First	5,000 gallons	\$48.05 minimum bill
Next	5,000 gallons	8.56 per 1,000 gallons
Next	40,000 gallons	7.69 per 1,000 gallons
Next	100,000 gallons	6.82 per 1,000 gallons
All Over	150,000 gallons	5.98 per 1,000 gallons

1 1/2" Meters

First	10,000 gallons	\$90.84 minimum bill
Next	40,000 gallons	7.69 per 1,000 gallons
Next	100,000 gallons	6.82 per 1,000 gallons
All Over	150,000 gallons	5.98 per 1,000 gallons

DATE OF ISSUE 10-07-15

Month / Date / Year

DATE EFFECTIVE 07-04-15

Month / Date / Year

ISSUED BY John R. Jones

TITLE Chairman

BY AUTHORITY OF OR \_\_\_\_\_ ER OF THE PUBLIC SERVICE COMMISSION

IN CASE NO. 2015-00204 \_\_\_\_\_ DATED \_\_\_\_\_

**KENTUCKY  
PUBLIC SERVICE COMMISSION**

**JEFF R. DEROUEN  
EXECUTIVE DIRECTOR**

TARIFF BRANCH

*Brent Kirtley*

EFFECTIVE  
**7/4/2015**

PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

FOR Grayson County, Kentucky

PSC KY NO. \_\_\_\_\_

SEVENTH REVISED SHEET NO. 4.1

CANCELLING PSC KY NO. \_\_\_\_\_

SIXTH SHEET NO. 4.1

Grayson County Water District  
(NAME OF UTILITY)

**Monthly Water Rates**

2-Inch Meters

First	16,000 gallons	\$136.97 Minimum Bill
Next	34,000 gallons	7.69 per 1,000 gallons
Next	100,000 gallons	6.82 per 1,000 gallons
All Over	150,000 gallons	5.98 per 1,000 gallons

3-Inch Meters

First	30,000 gallons	\$244.61 Minimum Bill
Next	20,000 gallons	7.69 per 1,000 gallons
Next	100,000 gallons	6.82 per 1,000 gallons
All Over	150,000 gallons	5.98 per 1,000 gallons

4-Inch Meters

First	50,000 gallons	\$398.38 Minimum Bill
Next	100,000 gallons	6.82 per 1,000 gallons
All Over	150,000 gallons	5.98 per 1,000 gallons

6-Inch Meters

First	100,000 gallons	\$739.39 Minimum Bill
Next	50,000 gallons	6.82 per 1,000 gallons
All Over	150,000 gallons	5.98 per 1,000 gallons

8-Inch Meters

First	150,000 gallons	\$1,080.27 Minimum Bill
All Over	150,000 gallons	5.98 per 1,000 gallons

10-Inch Meters

First	250,000 gallons	\$1,677.72 Minimum Bill
All Over	150,000 gallons	5.98 per 1,000 gallons

City of Caneyville	\$3.076 per 1,000 gallons	(D) (I)
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DATE OF ISSUE February 26, 2018  
MONTH / DATE / YEAR

DATE EFFECTIVE February 14, 2018  
MONTH / DATE / YEAR

ISSUED BY /s/ John R. Tomes  
SIGNATURE OF OFFICER

TITLE Chairman

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION

IN CASE NO. 2017-00379 DATED February 14, 2018





**XII. ANALYSIS OF ACTUAL WATER USAGE - EXISTING SYSTEM**

MONTHLY WATER USAGE

	Residential			Commercial		
	Average Usage	No. of Users	Total Usage	Average Usage	No. of Users	Total Usage
0 - 1,499 Gal.	516	2,214	1,142,338	371	194	71,943
1,500 - 2,499 Gal.	2,004	1,156	2,316,624	1,967	31	60,485
2,500 - 3,499 Gal.	2,975	1,002	2,980,454	2,966	24	70,195
3,500 - 4,499 Gal.	3,968	742	2,943,925	3,992	16	63,872
4,500 - 5,499 Gal.	4,960	480	2,379,147	4,977	12	60,554
5,500 - 6,499 Gal.	5,952	292	1,739,968	5,970	10	59,700
6,500 - 7,499 Gal.	6,949	190	1,320,889	7,001	7	46,673
7,500 - 8,499 Gal.	7,960	114	906,113	7,995	5	40,641
8,500 - 9,499 Gal.	8,969	82	732,468	8,973	4	38,135
9,500 - 10,499 Gal.	9,941	49	488,766	9,956	3	25,720
10,500 - 11,499 Gal.	10,972	37	409,621	11,039	2	22,998
11,500 - 12,499 Gal.	11,936	28	328,240	11,887	2	23,774
12,500 - 13,499 Gal.	12,940	21	266,348	13,060	2	21,767
13,500 - 14,499 Gal.	13,959	16	221,018	14,082	2	24,644
14,500 - 15,499 Gal.	14,973	11	169,694	14,919	1	17,406
15,500 - 16,499 Gal.	15,982	9	145,170	16,165	1	13,471
16,500 - 17,499 Gal.	16,965	8	137,134	17,051	1	8,526
17,500 - 18,499 Gal.	17,981	7	122,870	18,081	1	15,068
18,500 - 19,499 Gal.	19,031	5	98,327	18,957	1	11,058
19,500 - 20,499 Gal.	19,945	5	96,401	20,120	1	25,150
20,500 & Over	41,347	41	1,681,445	43,706	11	480,766
		<b>6,508</b>	<b>20,626,960</b>		<b>329</b>	<b>1,202,544</b>
Average Monthly Usage			<b>3,170</b>			<b>3,658</b>

		<b>Totals</b>	<b>6,508</b>	<b>20,626,960</b>	<b>329</b>	<b>1,202,544</b>
1 inch meters	0-5000	2,112	3	6,336	1,693	10
	5001-10000	7,172	1	7,172	7,400	6
	10001-50000	21,931	1	21,931	21,090	6
	50001-150000	76,926	1	76,926	83,768	2
	Over 150000	-	-	-	211,418	1
1.5 inch meters				96,989	5	452,615
2 inch meters	0-16000				2,946	4
	16001-150000				39,424	5
	Over 150000				417,229	4
3 inch meters	0-30000				9,869	1
	30001-150000				80,709	1
	Over 150000				1,800,000	1
4 inch meters	0-50000				4,453	4
	Over 50001				156,555	2
Wholesale - Caneyville				3,971,000	1	3,971,000
			<b>6,514</b>	<b>20,739,325</b>	<b>381</b>	<b>10,292,304</b>

**IX. FACILITY CHARACTERISTICS OF PROPOSED SEWER SYSTEM – NOT APPLICABLE**

**A. Sewage Treatment:**

1. Type:

2. Method of Sludge Disposal:

3. Cost per 1,000 gallons if sewage treatment is contracted:

**B. Treatment Capacity of Sewage Treatment Plant:**

**C. Type of Sewage Collector System (Describe):**

**D. Number and Capacity of Sewage Lift Stations:**

**E. Sewage Collection System:**

Lineal Feet of Collector Lines, by size: 6" \_\_\_\_\_ 8" \_\_\_\_\_  
10" \_\_\_\_\_ 12" \_\_\_\_\_ Larger \_\_\_\_\_

**X. LAND AND RIGHTS - PROPOSED SEWER SYSTEM NOT APPLICABLE**

*Number of Treatment Plant Sites*

*Number of Pump Stations*

*Number of Other Sites*

*Total Acreage*

*Purchase Price*

**XI. FACILITY CHARACTERISTICS OF PROPOSED WATER SYSTEM**

A. Water Source: Describe adequacy of source (quality and quantity). Include an explanation of raw water source, raw water intake structure, treatment plant capacity, and current level of production (WTP). Also describe the adequacy of Water Purchase Contract if applicable.

No change to water source with this project.

**B. Water Storage:**

Type:      Ground Storage Tank                      Elevated Tank

	Standpipe	Other	
Number of Storage Structures:		0	
Total Storage Volume Capacity:			
C. Water Distribution System:			
Pipe Material	HDPE		
Lineal Feet of Pipe:	3" Diameter	4"	1,400 LF
	6" 6,850 LF	8"	
	10"	12"	
Number and Capacity of Pump Station(s)		0	

**XII. LAND AND RIGHTS - PROPOSED WATER SYSTEM**

Number of Treatment Plant Sites	0
Number of Pump Sites	0
Number of Other Sites	2
Total Acreage	Less than an acre – 2 master meter sites
Purchase Price	\$0

**XIII. NUMBER OF NEW SEWER USERS – NOT APPLICABLE**

*Residential (In Town)\**

*Residential (Out of Town)\**

*Non-Residential (In Town)*

*Non-Residential (Out of Town)*

*Total*

*Number of Total Potential Users Living in the Service Area*

**\* NOTE:** *Residential Users: Classify by type of user regardless of quantity of water used. This classification should include those meters serving individual rural residences.*

**XIV. PROPOSED SEWER CONNECTION FEES FOR EACH SIZE METER CONNECTION – NOT APPLICABLE**

***NOT APPLICABLE***

**XV. NUMBER OF NEW WATER USERS**

Residential (In Town)*	0
Residential (Out of Town)*	0
Non-Residential (In Town)	0
Non-Residential (Out of Town)	0
Total	0

Number of Total Potential Users Living in the Service Area approx. 380

\* Note: Residential Users: Classify by type of user regardless of quantity of water used. This classification should include those meters serving individual rural residences.

**XVI. PROPOSED WATER CONNECTION FEES FOR EACH SIZE METER CONNECTION**

<u>Meter Size</u>	<u>Connection Fee</u>
5/8" x 3/4"	No Change
1 – Inch & Larger	No Change

**XVII. SEWER RATES – PROPOSED - NOT APPLICABLE**

**XVIII. WATER RATES – PROPOSED**

A. Proposed Rate Schedule **without** RUS Grant:

5/8 Inch

First 1,500 gallons	\$19.37 minimum
Next 8,500 gallons	\$9.10 per 1000 gallons
Next 40,000 gallons	\$8.18 per 1000 gallons
Next 100,000 gallons	\$7.26 per 1000 gallons
Over 150,000 gallons	\$6.37 per 1000 gallons

¾ Inch

First 3,000 gallons	\$32.85 minimum
Next 7,000 gallons	\$9.10 per 1000 gallons
Next 40,000 gallons	\$8.18 per 1000 gallons
Next 100,000 gallons	\$7.26 per 1000 gallons
Over 150,000 gallons	\$6.37 per 1000 gallons

One Inch	
First 5,000 gallons	\$50.97 minimum
Next 5,000 gallons	\$9.10 per 1000 gallons
Next 40,000 gallons	\$8.18 per 1000 gallons
Next 100,000 gallons	\$7.26 per 1000 gallons
Over 050,000 gallons	\$6.37 per 1000 gallons
1.5 Inch	
First 10,000 gallons	\$95.86 minimum
Next 40,000 gallons	\$8.18 per 1000 gallons
Next 100,000 gallons	\$7.26 per 1000 gallons
Over 150,000 gallons	\$6.37 per 1000 gallons
Two Inch	
First 16,000 gallons	\$145.23 minimum
Next 34,000 gallons	\$8.18 per 1000 gallons
Next 100,000 gallons	\$7.26 per 1000 gallons
Over 150,000 gallons	\$6.37 per 1000 gallons
Three Inch	
First 30,000 gallons	\$259.33 minimum
Next 20,000 gallons	\$8.18 per 1000 gallons
Next 100,000 gallons	\$7.26 per 1000 gallons
Over 150,000 gallons	\$6.37 per 1000 gallons
Four Inch	
First 50,000 gallons	\$422.32 minimum
Next 100,000 gallons	\$7.26 per 1000 gallons
Over 150,000 gallons	\$6.37 per 1000 gallons
Six Inch	
First 100,000 gallons	\$783.79 minimum
Next 50,000 gallons	\$7.26 per 1000 gallons
Over 150,000 gallons	\$6.37 per 1000 gallons
Eight Inch	
First 150,000 gallons	\$1,145.13 minimum
Over 150,000 gallons	\$6.37 per 1000 gallons
Ten Inch	
First 250,000 gallons	\$1,778.42 minimum
Over 250,000 gallons	\$6.37 per 1000 gallons
Wholesale Rate	\$3.076 per 10000 gallons

The above proposed rate, without RUS grant, must be completed for each grant. If the applicant/engineer desires, there is no objection to recommending a proposed rate with an estimated RUS grant in the Table below. However, the preparer should remember that the Table (A) above must be completed prior to Table (B).

B. Recommended Rate with RD Grant:

5/8 Inch

First 1,500 gallons	\$19.35 minimum
Next 8,500 gallons	\$9.07 per 1000 gallons
Next 40,000 gallons	\$8.15 per 1000 gallons
Next 100,000 gallons	\$7.23 per 1000 gallons
Over 150,000 gallons	\$6.34 per 1000 gallons

¾ Inch

First 3,000 gallons	\$32.95 minimum
Next 7,000 gallons	\$9.07 per 1000 gallons
Next 40,000 gallons	\$8.15 per 1000 gallons
Next 100,000 gallons	\$7.23 per 1000 gallons
Over 150,000 gallons	\$6.34 per 1000 gallons

One Inch

First 5,000 gallons	\$51.10 minimum
Next 5,000 gallons	\$9.07 per 1000 gallons
Next 40,000 gallons	\$8.15 per 1000 gallons
Next 100,000 gallons	\$7.23 per 1000 gallons
Over 050,000 gallons	\$6.34 per 1000 gallons

1.5 Inch

First 10,000 gallons	\$96.45 minimum
Next 40,000 gallons	\$8.15 per 1000 gallons
Next 100,000 gallons	\$7.23 per 1000 gallons
Over 150,000 gallons	\$6.34 per 1000 gallons

Two Inch

First 16,000 gallons	\$145.35 minimum
Next 34,000 gallons	\$8.15 per 1000 gallons
Next 100,000 gallons	\$7.23 per 1000 gallons
Over 150,000 gallons	\$6.34 per 1000 gallons

Three Inch

First 30,000 gallons	\$259.45 minimum
Next 20,000 gallons	\$8.15 per 1000 gallons
Next 100,000 gallons	\$7.23 per 1000 gallons
Over 150,000 gallons	\$6.34 per 1000 gallons

Four Inch	
First 50,000 gallons	\$422.45 minimum
Next 100,000 gallons	\$7.23 per 1000 gallons
Over 150,000 gallons	\$6.34 per 1000 gallons
Six Inch	
First 100,000 gallons	\$783.95 minimum
Next 50,000 gallons	\$7.23 per 1000 gallons
Over 150,000 gallons	\$6.34 per 1000 gallons
Eight Inch	
First 150,000 gallons	\$1,145.45 minimum
Over 150,000 gallons	\$6.34 per 1000 gallons
Ten Inch	
First 250,000 gallons	\$1,779.45 minimum
Over 250,000 gallons	\$6.34 per 1000 gallons
Wholesale Rate	\$3.076 per 10000 gallons

**NOTE:     These pages have not been included as they are not applicable as Grayson County Water District only provides water service:**

- Forecast of Sewer Usage – Income – Existing System – Existing Users*
- Forecast of Sewer Usage – Income – New Users – Extension Only*
- Current Operating Budget (Sewer System)*
- Proposed Operating Budget (Sewer System) – Existing*
- Proposed Operating Budget (Sewer System) – New Users – Extension Only*

XXV. FORECAST OF WATER - INCOME - EXISTING SYSTEM

MONTHLY WATER USAGE

	Residential					Commercial				
	Average Usage	Average Rate	No. of Users	Usage	Income	Average Usage	Average Rate	No. of Users	Usage	Income
0 - 1,499 Gal.	516	\$ 19.35	2,214	1,142,338	\$ 42,838	371	\$ 19.35	194	71,943	\$ 3,752
1,500 - 2,499 Gal.	2,004	\$ 23.92	1,156	2,316,624	\$ 27,653	1,967	\$ 23.59	31	60,485	\$ 725
2,500 - 3,499 Gal.	2,975	\$ 32.73	1,002	2,980,454	\$ 32,788	2,966	\$ 32.65	24	70,195	\$ 773
3,500 - 4,499 Gal.	3,968	\$ 41.73	742	2,943,925	\$ 30,964	3,992	\$ 41.95	16	63,872	\$ 671
4,500 - 5,499 Gal.	4,960	\$ 50.73	480	2,379,147	\$ 24,335	4,977	\$ 50.89	12	60,554	\$ 619
5,500 - 6,499 Gal.	5,952	\$ 59.73	292	1,739,968	\$ 17,461	5,970	\$ 59.89	10	59,700	\$ 599
6,500 - 7,499 Gal.	6,949	\$ 68.77	190	1,320,889	\$ 13,072	7,001	\$ 69.24	7	46,673	\$ 462
7,500 - 8,499 Gal.	7,960	\$ 77.94	114	906,113	\$ 8,872	7,995	\$ 78.26	5	40,641	\$ 398
8,500 - 9,499 Gal.	8,969	\$ 87.09	82	732,468	\$ 7,113	8,973	\$ 87.13	4	38,135	\$ 370
9,500 - 10,499 Gal.	9,941	\$ 95.91	49	488,766	\$ 4,716	9,956	\$ 96.05	3	25,720	\$ 248
10,500 - 11,499 Gal.	10,972	\$ 104.37	37	409,621	\$ 3,896	11,039	\$ 104.91	2	22,998	\$ 219
11,500 - 12,499 Gal.	11,936	\$ 112.22	28	328,240	\$ 3,086	11,887	\$ 111.82	2	23,774	\$ 224
12,500 - 13,499 Gal.	12,940	\$ 120.41	21	266,348	\$ 2,478	13,060	\$ 121.38	2	21,767	\$ 202
13,500 - 14,499 Gal.	13,959	\$ 128.71	16	221,018	\$ 2,038	14,082	\$ 129.71	2	24,644	\$ 227
14,500 - 15,499 Gal.	14,973	\$ 136.97	11	169,694	\$ 1,552	14,919	\$ 136.53	1	17,406	\$ 159
15,500 - 16,499 Gal.	15,982	\$ 145.20	9	145,170	\$ 1,319	16,165	\$ 146.69	1	13,471	\$ 122
16,500 - 17,499 Gal.	16,965	\$ 153.21	8	137,134	\$ 1,238	17,051	\$ 153.91	1	8,526	\$ 77
17,500 - 18,499 Gal.	17,981	\$ 161.49	7	122,870	\$ 1,104	18,081	\$ 162.31	1	15,068	\$ 135
18,500 - 19,499 Gal.	19,031	\$ 170.05	5	98,327	\$ 879	18,957	\$ 169.44	1	11,058	\$ 99
19,500 - 20,499 Gal.	19,945	\$ 177.50	5	96,401	\$ 858	20,120	\$ 178.92	1	25,150	\$ 224
20,500 & Over	41,347	\$ 351.92	41	1,681,445	\$ 14,312	43,706	\$ 371.15	11	480,766	\$ 4,083
<b>Subtotal</b>			<b>6,508</b>	<b>20,626,960</b>	<b>\$242,571</b>			<b>329</b>	<b>1,202,544</b>	<b>\$14,388</b>
Average Monthly Rate	\$ 34.49					\$ 38.92				
Average Monthly Usage				3,170					3,658	
1 Inch meters	2,112	\$ 51.10	3	6,336	\$ 153	1,693	\$ 51.10	10	16,930	\$ 511
	7,172	\$ 70.80	1	7,172	\$ 71	7,400	\$ 72.86	6	44,400	\$ 437
	21,931	\$ 193.68	1	21,931	\$ 194	21,090	\$ 186.83	6	126,540	\$ 1,121
	76,926	\$ 617.12	1	76,926	\$ 617	83,768	\$ 666.59	2	167,536	\$ 1,333
						211,418	\$ 1,534.84	1	211,418	\$ 1,535



1.5 Inch meters	96,989	\$ 762.18	5	452,615	\$ 3,557
2 Inch meters	2,946	\$ 145.35	4	11,784	\$ 581
	39,424	\$ 336.25	5	197,120	\$ 1,681
	417,229	\$ 2,839.68	4	1,668,916	\$ 11,359
3 Inch meters	9,869	\$ 259.45	1	9,869	\$ 259
	80,709	\$ 347.45	1	80,709	\$ 347
	1,800,000	\$ 11,606.45	1	1,800,000	\$ 11,606
4 Inch meters	4,453	\$ 422.45	4	17,812	\$ 1,690
	156,555	\$ 1,187.00	2	313,110	\$ 2,374
Wholesale - Caneyville	3,971,000	\$ 11,003.64	1	3,971,000	\$ 11,004
<b>Monthly Totals:</b>	<b>6,514</b>	<b>20,739,325</b>	<b>\$ 243,606</b>	<b>381</b>	<b>10,292,304</b>
<b>Annual Total:</b>	<b>\$ 2,923,274</b>			<b>\$ 765,405</b>	

XXVI. FORECAST OF WATER - INCOME - NEW USERS - EXTENSION ONLY

MONTHLY WATER USAGE	Average	Residential			Commercial		
		Average	No. of	Usage	No. of	Usage	Income
Average	Rate	Users	1,000	Income	Users	1,000	Income
<i>5/8 x 3/4 meter</i>							
0 - 1,499 Gal.	19.35						
1,500 - 2,499 Gal.	1,500	23.92	0	0	0	0	0
2,500 - 3,499 Gal.	2,500	32.73	0	0	0	0	0
3,500 - 4,499 Gal.	3,500	41.73	0	0	0	0	0
4,500 - 5,499 Gal.	4,500	50.73	0	0	0	0	0
5,500 - 6,499 Gal.	5,500	59.73	0	0	0	0	0
6,500 - 7,499 Gal.	6,500	68.77	0	0	0	0	0
7,500 - 8,499 Gal.	7,500	77.94	0	0	0	0	0
8,500 - 9,499 Gal.	8,500	87.09	0	0	0	0	0
9,500 - 10,499 Gal.	9,500	95.91	0	0	0	0	0
10,500 - 11,499 Gal.	10,500	104.37	0	0	0	0	0
11,500 - 12,499 Gal.	11,500	112.22	0	0	0	0	0
12,500 - 13,499 Gal.	12,500	120.41	0	0	0	0	0
13,500 - 14,499 Gal.	13,500	128.71	0	0	0	0	0
14,500 - 15,499 Gal.	14,500	136.97	0	0	0	0	0
15,500 - 16,499 Gal.	15,500	145.20	0	0	0	0	0
16,500 - 17,499 Gal.	16,500	153.21	0	0	0	0	0
17,500 - 18,499 Gal.	17,500	161.49	0	0	0	0	0
18,500 - 19,499 Gal.	18,500	170.05	0	0	0	0	0
19,500 - 20,499 Gal.	19,500	351.92	0	0	0	0	0
20,500 & Over	22,150	Subtotal	0		0		
	<i>Subtotal</i>		<i>0</i>	<i>0</i>	<i>\$0</i>	<i>0</i>	<i>\$0</i>
Average Monthly Rate							
Average Monthly Usage							

**XXX. CURRENT OPERATING BUDGET - (WATER SYSTEM)**

	Year Ending	2019
A.	Operating Income:	
	Water Sales	\$ 3,585,543
	Disconnect/Reconnect/Late Charge Fees	
	Other (Describe)      Forfeited Discounts & Misc Revenue	\$ 118,703
	Less Allowances and Deductions	
	Total Operating Income	<u>\$ 3,704,246</u>
B.	Operation and Maintenance Expenses: (Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)	
	Source of Supply Expense	\$ 420,909
	Pumping Expense	\$ 173,936
	Water Treatment Expense	\$ 592,993
	Transmission and Distribution Expense	\$ 422,757
	Customer Accounts Expense	\$ 415,081
	Administrative and General Expense	<u>\$ 524,687</u>
	Total Operating Expenses	<u>\$ 2,550,363</u>
	Net Operating Income	\$ 1,153,883
C.	Non-Operating Income:	
	Interest on Deposits	\$ 26,637
	Other (Identify)	\$ 52,869
	Total Non-Operating Income	\$ 79,506
D.	Net Income	<u>\$ 1,233,389</u>
E.	Debt Repayment:	
	RD Interest	\$ 91,549
	RD Principal	\$ 61,000
	Reserve	\$ 49,000
	Non-RD Interest	\$ 150,184
	Non-RD Principal	<u>\$ 539,648</u>
	Total Debt Repayment	\$ 891,381
F.	Balance Available for Coverage and Depreciation	\$ 342,008
	Debt Coverage Ratio	1.38

**XXXI. PROPOSED OPERATING BUDGET - (WATER SYSTEM) - EXISTING USERS**

(1st Full Year of Operation)

Year Ending

2021

## A. Operating Income:

Water Sales	\$	3,688,680
Disconnect/Reconnect/Late Charge Fees	\$	168,000
Other (Describe)		

Less Allowances and Deductions

Total Operating Income	\$	<u>3,856,680</u>
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## B. Operation and Maintenance Expenses:

(Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)

Source of Supply Expense	\$	400,000
Pumping Expense	\$	200,000
Water Treatment Expense	\$	665,000
Transmission and Distribution Expense	\$	430,000
Customer Accounts Expense	\$	480,000
Administrative and General Expense	\$	600,000

Total Operating Expenses	\$	<u>2,775,000</u>
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Net Operating Income	\$	1,081,680
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## C. Non-Operating Income:

Interest on Deposits	<i>Cell Tower Rent</i>	\$	64,000
Other (Identify)	<i>Interest</i>	\$	27,000

Total Non-Operating Income	\$	91,000
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## D. Net Income

\$	<u>1,172,680</u>
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## E. Debt Repayment:

RD Interest	\$	113,156
RD Principal	\$	76,155
Reserve	\$	55,000
Non-RD Interest	\$	123,835
Non-RD Principal	\$	567,662

Total Debt Repayment	\$	<u>935,808</u>
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Short Lived Assets	\$	230,600
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## F. Balance Available for Coverage and Depreciation

\$	6,272
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Debt Coverage Ratio	<i>(net income divided by total debt repayment)</i>	1.25
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**XXXII. PROPOSED OPERATING BUDGET - (WATER SYSTEM) - NEW USERS ONLY**

(1st Full Year of Operation)

Year Ending

A.	Operating Income:		
	Water Sales	\$	-
	Disconnect/Reconnect/Late Charge Fees	\$	-
	Other (Describe)		
	Less Allowances and Deductions		
	Total Operating Income	\$	-
B.	Operation and Maintenance Expenses:		
	(Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)		
	Source of Supply Expense	\$	-
	Pumping Expense	\$	-
	Water Treatment Expense	\$	-
	Transmission and Distribution Expense	\$	-
	Customer Accounts Expense	\$	-
	Administrative and General Expense	\$	-
	Total Operating Expenses	\$	-
	Net Operating Income	\$	-
C.	Non-Operating Income:		
	Interest on Deposits		
	Other (Identify)		
	Total Non-Operating Income	\$	-
D.	Net Income	\$	-
E.	Debt Repayment:		
	RD Interest	\$	-
	RD Principal	\$	-
	Reserve		
	Non-RD Interest		
	Non-RD Principal		
	Total Debt Repayment	\$	-
F.	Balance Available for Coverage and Depreciation	\$	-

XXXV. ESTIMATED PROJECT COST - WATER

Development	\$	1,037,360
Land and Rights	\$	8,000
Legal	\$	10,000
Engineering	\$	160,700
Interest	\$	15,000
Contingencies	\$	-
Initial O & M	\$	-
Other	\$	-
TOTAL	\$	<u><u>1,231,060</u></u>

XXXVI. PROPOSED PROJECT FUNDING - WATER

Applicant - User Connection Fees		
Other Applicant Contribution		
RD Financial Assistance - Initial Loan	\$	539,000
Initial Grant	\$	271,200
RD Subsequent Loan	\$	256,000
RD Subsequent Grant	\$	100,860
Other - GCWD Contribution	\$	64,000
Other -		
TOTAL	\$	<u><u>1,231,060</u></u>

Short Lived Assets

Type of Reserve	User Description	Replacement Cost	Reserve on Hand	Annual Reserve
1-5 Years	Add UV at Water Plant			\$ -
1-5 Years	Upgrade MVRs Software	\$ 10,000		\$ 2,000
1-5 Years	Truck (WD 07)	\$ 30,000		\$ 6,000
1-5 Years	Truck (WD13)	\$ 30,000		\$ 6,000
1-5 Years	Truck (WD 18)	\$ 30,000		\$ 6,000
1-5 Years	Truck (WD 17)	\$ 30,000		\$ 6,000
1-5 Years	Asset Management Software	\$ 45,000		\$ 9,000
1-5 Years	Repeater System for Truck Radios	\$ 20,000		\$ 4,000
1-5 Years	Update SCADA System	\$ 50,000		\$ 10,000
1-5 Years	Paint Hwy. 185 Tank	\$ 150,000		\$ 15,000
Subtotal 1-5 Years				\$ 64,000
5-10 Years	Replace 1,000 Radio Read Meters	\$ 189,000		\$ 18,900
5-10 Years	Replace 3,000 Radio Read Meters	\$ 567,000		\$ 56,700
5-10 Years	Truck With Service Bed and Duals (WD15)	\$ 80,000		\$ 8,000
5-10 Years	Truck With Service Bed/1 Ton (WD16)	\$ 60,000		\$ 6,000
5-10 Years	Truck (WD 19)	\$ 30,000		\$ 3,000
5-10 Years	Truck (WD 20)	\$ 30,000		\$ 3,000
5-10 Years	Update SCADA System	\$ 100,000		\$ 10,000
Subtotal 5-10 Years				\$ 105,600
10-15 Years	Replace High Service Pumps	\$ 250,000		\$ 16,667
10-15 Years	Update SCADA System	\$ 200,000		\$ 13,333
10-15 Years	Truck (WD 07)	\$ 35,000		\$ 2,333
10-15 Years	Truck (WD13)	\$ 35,000		\$ 2,333
10-15 Years	Truck (WD 18)	\$ 35,000		\$ 2,333
10-15 Years	Truck (WD 17)	\$ 35,000		\$ 2,333
10-15 Years	Paint Lone Hill Tank	\$ 175,000		\$ 11,667
10-15 Years	Paint Big Clifty Tank	\$ 150,000		\$ 10,000
10-15 Years		\$ -		\$ -
Subtotal 10-15 Years				\$ 61,000
Replacement Reserve - Short Lived Assets				\$ 230,600
			Monthly Total:	\$ 19,217