

**Kentucky Infrastructure Authority  
Projects for  
October 2018 Capital Projects Meeting**

- **Fund A Loan**

<u>Loan #</u>	<u>Borrower</u>	<u>Loan Amount</u>	<u>County</u>
A15-094	City of Glasgow (Increase)	\$ 5,298,000	Barren

- **Fund B Loan**

<u>Loan #</u>	<u>Borrower</u>	<u>Loan Amount</u>	<u>County</u>
B19-001	City of Calvert City	\$ 542,900	Marshall
B19-004	City of Mount Washington	\$ 1,599,630	Bullitt

- **Fund F Loan**

<u>Loan #</u>	<u>Borrower</u>	<u>Loan Amount</u>	<u>County</u>
F18-005	Green-Taylor Water District (Increase)	\$ 1,963,390	Taylor

<b>EXECUTIVE SUMMARY</b> <b>KENTUCKY INFRASTRUCTURE AUTHORITY</b> <b>FUND A, FEDERALLY ASSISTED WASTEWATER</b> <b>REVOLVING LOAN FUND</b>		Reviewer Date KIA Loan Number WRIS Number	Meili Sun September 26, 2018 A15-094 (Increase) SX21009018	
BORROWER	CITY OF GLASGOW BARREN COUNTY			
BRIEF DESCRIPTION				
<p>This request is for a \$1,798,000 increase to a previously approved loan in the amount of \$3,500,000. The new loan total is \$5,298,000. The increase will substitute for funds that were originally committed by the Glasgow Water and Sewer Commission. The additional KIA funding will allow the Commission to use rate generated revenues for other capital projects.</p> <p>This project consists of relaying and upgrading a large portion of the southside interceptor to eliminate historical SSO's and provides additional capacity for future growth. This project will consist of upgrading 5,300 feet of existing 24 inch gravity line to 42 inch line from SSO #8 (old WWTP) to existing WWTP and upgrading 9,000 feet of existing 24 inch gravity line to 36 inch from SSO #13 (500' east of KY Hwy 249) to SSO #8 (old WWTP). The project would eliminate several SSO's and reduce ongoing maintenance on an aged interceptor.</p>				
PROJECT FINANCING		PROJECT BUDGET		
Fund A Loan	\$5,298,000	Administrative Expenses	\$0	
Local Fund	617	Legal Expenses	0	
		Eng - Design / Const	6.8% 4.9% 244,000	
		Eng - Insp	3.5% 1.8% 90,000	
		Construction	4,513,288	
		Contingency	451,329	
TOTAL	\$5,298,617	TOTAL	\$5,298,617	
REPAYMENT	Rate	0.75%	Est. Annual Payment \$195,780	
	Term	20 Years	1st Payment 6 Mo. after first draw	
PROFESSIONAL SERVICES	Engineer	Cannon & Cannon, Inc.		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	Apr-16		
	Construction Start	Jul-16		
	Construction Stop	Sep-17		
DEBT PER CUSTOMER	Existing	\$2,505		
	Proposed	\$2,513		
OTHER DEBT	See Attached			
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	6,098	\$19.60 (for 4,000 gallons)	
	Additional	0	\$19.60 (for 4,000 gallons)	
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2015	3,184,971	1,101,411	2,083,560	2.9
Audited 2016	3,556,835	1,277,357	2,279,478	2.8
Audited 2017	3,689,672	1,163,031	2,526,641	3.2
Projected 2018	3,564,426	1,254,138	2,310,288	2.8
Projected 2019	3,432,180	1,382,437	2,049,744	2.5
Projected 2020	3,301,874	1,427,124	1,874,750	2.3
Projected 2021	3,168,962	1,435,875	1,733,087	2.2
Projected 2022	3,033,391	1,431,174	1,602,217	2.1

Reviewer: Meili Sun  
Date: September 26, 2018  
Loan Number: A15-094 Increase

**KENTUCKY INFRASTRUCTURE AUTHORITY  
WASTEWATER REVOLVING LOAN FUND (FUND A)  
CITY OF GLASGOW, BARREN COUNTY  
PROJECT REVIEW  
SX21009108**

**I. PROJECT DESCRIPTION**

This request is for a \$1,798,000 increase to a previously approved loan in the amount of \$3,500,000. The new loan total is \$5,298,000. This increase will substitute for funds that were originally committed by the Glasgow Water and Sewer Commission. The project is complete and currently in the repayment phase. The additional KIA funding will allow the Commission to use rate generated revenues for other projects. The Commission will continue to make monthly repayment on the initial loan amount. Once the loan is fully disbursed, the repayment will be increased by the additional debt service from the additional funding.

The project consisted of relaying and upgrading a large portion of the southside interceptor to eliminate historical SSO's and provide additional capacity for future growth. This project upgraded 5,300 feet of existing 24 inch gravity line to 42 inch line from SSO #8 (old WWTP) to existing WWTP and upgraded 9,000 feet of existing 24 inch gravity line to 36 inch from SSO #13 (500' east of KY Hwy 249) to SSO #8 (old WWTP). The project eliminated several SSO's and reduced ongoing maintenance on an aged interceptor.

**II. PROJECT BUDGET**

	<u>Total</u>
Engineering Fees - Design	\$ 244,000
Engineering Fees – Inspection	90,000
Construction	4,513,288
Contingency	451,329
<b>Total</b>	<b>\$ 5,298,617</b>

**III. PROJECT FUNDING**

	<u>Amount</u>	<u>%</u>
Fund A Loan	\$ 5,298,000	99.99%
Local Funds	617	0.01%
<b>Total</b>	<b>\$ 5,298,617</b>	<b>100%</b>

#### IV. KIA DEBT SERVICE

Construction Loan	\$ 5,298,000
Interest Rate	0.75%
Loan Term (Years)	20
Estimated Annual Debt Service	\$ 285,759
Administrative Fee (0.20%)	10,596
<b>Total Estimated Annual Debt Service</b>	<b>\$ 296,355</b>

#### V. PROJECT SCHEDULE

Bid Opening	April 18, 2016
Construction Start	July 29, 2016
Construction Stop	September 6, 2017

#### VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

##### A) Customers

Customers	Current
Residential	5,190
Commercial	849
Industrial	59
Total	6,098

##### B) Rates

	Inside City Water		Outside City Water	
	Current	Prior	Current	Prior
Date of Last Rate Increase	08/01/16	10/01/12	08/01/16	10/01/12
First 2,000 Gallons	\$ 8.67	\$ 8.42	\$12.39	\$12.03
Next 18,000 Gallons	3.20	3.11	4.00	3.89
Cost for 4,000 gallons	<b>\$15.07</b>	<b>\$14.64</b>	<b>\$20.39</b>	<b>\$19.81</b>
Increase %	2.9%		2.9%	
Affordability Index (Rate/MHI)	0.6%		0.8%	

	Inside City Sewer		Outside City Sewer	
	Current	Prior	Current	Prior
Date of Last Rate Increase	08/01/16	10/01/12	08/01/16	10/01/12
First 2,000 Gallons	\$11.48	\$11.15	\$14.15	\$14.15
Over 2,000 Gallons	4.06	3.95	4.80	4.80
Cost for 4,000 gallons	<b>\$19.60</b>	<b>\$19.05</b>	<b>\$23.75</b>	<b>\$23.75</b>
Increase %	2.9%		0.0%	
Affordability Index (Rate/MHI)	0.8%		0.9%	

## VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 15,071 with a Median Household Income (MHI) of \$30,064. The median household income for the Commonwealth is \$42,610 in 2015. The project will qualify for a 0.75% interest rate because the utility's service area MHI is below 80% of the State's MHI.

Year	Population		County		County Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	12,958		34,009		June 2005	5.2%
1990	12,351	-4.7%	34,001	0.0%	June 2010	10.8%
2000	13,019	5.4%	38,033	11.9%	June 2015	5.2%
2010	14,028	7.8%	42,173	10.9%	June 2018	4.8%
Current	14,338	2.2%	43,287	2.6%		
Cumulative %		10.6%		27.3%		

## VIII. 2016 CAPITALIZATION GRANT EQUIVALENCIES

- 1) Green Project Reserve - This project does not qualify for Green Project Reserve (GPR) funding.
- 2) Additional Subsidization – This project does not qualify for additional subsidization.

## IX. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2015 through June 30, 2017. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2015 2016, and 2017 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

## HISTORY

Combined water and sewer revenues went up 8.1% from \$9.2 million in 2015 to \$9.9 million in 2017 due to previously approved rate increases. Operating expenses increased 4.1% from \$6.0 million to \$6.3 million during the same period. Debt coverage ratio was 2.9, 2.8, and 3.2 in 2015, 2016, and 2017 respectively.

The balance sheet reflects a current ratio of 19.1, debt to equity ratio of 0.4, 21.1 days sales in accounts receivable, and 13.9 months of operating expenses in unrestricted cash.

## PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues may go up as the Glasgow Water and Sewer Commission has the authority to raise rates not to exceed 3% annually through 2021 without approval from the Glasgow City Council.
- 2) Expenses will increase 2% annually for general inflation.
- 3) Debt coverage ratio is 2.3 in 2020 when full-year principal and interest repayments for the new loan total begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund A loan.

## REPLACEMENT RESERVE

The replacement reserve will be 5% (\$264,000 total) of the final amount borrowed to be funded annually (\$13,200 yearly) each December 1 for 20 years and maintained for the life of the loan.

## X. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
Revenue Bonds Series 2003A	\$ 3,015,000	2023
Revenue Bonds Series 2013	5,960,000	2043
KIA Loan C14-002	2,803,229	2035
KIA Loan A15-094 Initial	3,500,000	2037
	<u>\$ 15,278,229</u>	

## **XI. CONTACTS**

<b>Legal Applicant</b>	
Name	City of Glasgow
Address	126 E. Public Square, PO Box 819 Glasgow, KY 42141
County	Barren
Authorized Official	Dick Doty, Mayor
Phone	(270) 651-1777
Email	dickdoty@glasgow-ky.com

<b>Project Contact/Administrator</b>	
Name	Jeffrey Reed
Representing	Glasgow Water Company
Address	PO Box 819 Glasgow, KY 42142
Phone	(270) 651-3727
Email	jreed@glasgowh2o.com

<b>Consulting Engineer</b>	
Name	Timothy Tucker
Firm	Cannon & Cannon, Inc.
Address	8550 Kingston Pike Knoxville, TN 37919
Phone	(865) 670-8555
Email	ttucker@cannon-cannon.com

## **XII. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions.

**CITY OF GLASGOW**  
**FINANCIAL SUMMARY (JUNE YEAR END)**

	<u>Audited</u> <u>2015</u>	<u>Audited</u> <u>2016</u>	<u>Audited</u> <u>2017</u>	<u>Projected</u> <u>2018</u>	<u>Projected</u> <u>2019</u>	<u>Projected</u> <u>2020</u>	<u>Projected</u> <u>2021</u>	<u>Projected</u> <u>2022</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	6,358,268	7,932,361	8,174,228	8,405,296	8,610,270	8,797,745	8,971,054	9,131,276
Other Assets	54,670,650	55,768,591	61,292,405	60,040,790	61,607,470	61,218,656	60,702,346	60,068,252
<b>Total</b>	<b>61,028,918</b>	<b>63,700,952</b>	<b>69,466,633</b>	<b>68,446,086</b>	<b>70,217,741</b>	<b>70,016,402</b>	<b>69,673,400</b>	<b>69,199,528</b>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	490,156	336,614	427,704	432,468	437,368	442,368	447,468	452,668
Long Term Liabilities	16,566,090	16,984,276	20,262,858	19,055,491	19,919,722	18,978,863	18,020,099	17,046,153
<b>Total Liabilities</b>	<b>17,056,246</b>	<b>17,320,890</b>	<b>20,690,562</b>	<b>19,487,959</b>	<b>20,357,090</b>	<b>19,421,231</b>	<b>18,467,567</b>	<b>17,498,821</b>
<b>Net Assets</b>	<b>43,972,672</b>	<b>46,380,062</b>	<b>48,776,071</b>	<b>48,958,127</b>	<b>49,860,651</b>	<b>50,595,171</b>	<b>51,205,833</b>	<b>51,700,707</b>
<b>Cash Flow</b>								
Revenues	9,174,418	9,588,623	9,918,064	9,918,064	9,918,064	9,918,064	9,918,064	9,918,064
Operating Expenses	6,011,558	6,059,491	6,262,311	6,387,557	6,519,803	6,650,109	6,783,021	6,918,592
Other Income	22,111	27,703	33,919	33,919	33,919	33,919	33,919	33,919
<b>Cash Flow Before Debt Service</b>	<b>3,184,971</b>	<b>3,556,835</b>	<b>3,689,672</b>	<b>3,564,426</b>	<b>3,432,180</b>	<b>3,301,874</b>	<b>3,168,962</b>	<b>3,033,391</b>
<b>Debt Service</b>								
Existing Debt Service	1,101,411	1,277,357	1,163,031	1,254,138	1,332,149	1,326,549	1,335,300	1,330,599
Proposed KIA Loan A15-094 Increase	0	0	0	0	50,288	100,575	100,575	100,575
<b>Total Debt Service</b>	<b>1,101,411</b>	<b>1,277,357</b>	<b>1,163,031</b>	<b>1,254,138</b>	<b>1,382,437</b>	<b>1,427,124</b>	<b>1,435,875</b>	<b>1,431,174</b>
<b>Cash Flow After Debt Service</b>	<b>2,083,560</b>	<b>2,279,478</b>	<b>2,526,641</b>	<b>2,310,288</b>	<b>2,049,744</b>	<b>1,874,750</b>	<b>1,733,087</b>	<b>1,602,217</b>
<b>Ratios</b>								
Current Ratio	13.0	23.6	19.1	19.4	19.7	19.9	20.0	20.2
Debt to Equity	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3
Days Sales in Accounts Receivable	20.9	21.1	21.1	21.1	21.1	21.1	21.1	21.1
Months Operating Expenses in Unrestricted Cash	11.2	13.7	13.9	14.0	14.1	14.2	14.2	14.2
Debt Coverage Ratio	2.9	2.8	3.2	2.8	2.5	2.3	2.2	2.1



<b>EXECUTIVE SUMMARY</b> <b>KENTUCKY INFRASTRUCTURE AUTHORITY</b> <b>FUND B, INFRASTRUCTURE</b> <b>REVOLVING LOAN FUND</b>		Reviewer Date KIA Loan Number WRIS Number	Melissa Rife September 26, 2018 B19-001 WX21035006
BORROWER		CITY OF CALVERT CITY MARSHALL COUNTY	
BRIEF DESCRIPTION This project will increase flows, improve pressure, allow accessibility, and reduce the maintenance burden of the system by replacing the aged and undersized CIP mains located along the rear of the properties in the project area with 4,350 linear feet of 6 inch and 8 inch PVC and DIP water mains.			
PROJECT FINANCING		PROJECT BUDGET	RD Fee %      Actual %
Fund B Loan	\$542,900	Administrative Expenses	\$25,000
Local Funds	67,900	Legal Expenses	2,500
		Land, Easements	4,000
		Planning	7,800
		Eng - Design / Const	10.3%      8.9%      43,800
		Eng - Insp	7.4%      6.0%      29,300
		Eng - Other	6,700
		Construction	447,000
		Contingency	44,700
TOTAL	\$610,800	TOTAL	\$610,800
REPAYMENT	Rate Term	2.00% 20 Years	Est. Annual Payment 1st Payment    6 Mo. after first draw      \$34,154
PROFESSIONAL SERVICES	Engineer Bond Counsel	Rivercrest Engineering Incorporated Dinsmore & Shohl, LLP	
PROJECT SCHEDULE	Bid Opening Construction Start Construction Stop	August 2018 October 2018 June 2019	
DEBT PER CUSTOMER	Existing Proposed	\$840 \$1,016	
OTHER DEBT	See Attached		
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached		
RESIDENTIAL RATES	Current Additional	Users 1,552 0	Avg Water Bill    Avg Sewer Bill \$14.95      \$28.09 (for 4,000 gallons) \$14.95      \$28.09 (for 4,000 gallons)
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.		
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service      Coverage Ratio
Audited 2015	606,775	143,840	462,935      4.2
Audited 2016	580,070	139,126	440,944      4.2
Audited 2017	427,648	156,966	270,682      2.7
Projected 2018	433,026	172,312	260,714      2.5
Projected 2019	438,511	182,437	256,074      2.4
Projected 2020	444,106	194,035	250,071      2.3
Projected 2021	448,413	225,249	223,164      2.0
Projected 2022	454,234	158,838	295,396      2.9

Reviewer: Melissa Rife  
Date: September 26, 2018  
Loan Number: B19-001

**KENTUCKY INFRASTRUCTURE AUTHORITY  
INFRASTRUCTURE REVOLVING LOAN FUND (FUND B)  
CITY OF CALVERT CITY, MARSHALL COUNTY  
PROJECT REVIEW  
WX21035006**

**I. PROJECT DESCRIPTION**

The City of Calvert City is requesting a Fund B loan in the amount of \$542,900 for the Heights Phase IV Water Main Replacement – Cherry & Cedar Streets project. This project will increase flows, improve pressure, allow accessibility, and reduce the maintenance burden of the system by replacing the aged and undersized CIP mains located along the rear of the properties in the project area with 4,350 linear feet of 6 inch and 8 inch PVC and DIP water mains.

**II. PROJECT BUDGET**

	<u>Total</u>
Administrative Expenses	\$ 25,000
Legal Expenses	2,500
Land, Easements	4,000
Planning	7,800
Engineering Fees - Design	28,600
Engineering Fees - Construction	15,200
Engineering Fees - Inspection	29,300
Engineering Fees - Other	6,700
Construction	447,000
Contingency	44,700
<b>Total</b>	<b>\$ 610,800</b>

**III. PROJECT FUNDING**

	<u>Amount</u>	<u>%</u>
Fund B Loan	\$ 542,900	89%
Local Funds	67,900	11%
<b>Total</b>	<b>\$ 610,800</b>	<b>100%</b>

#### IV. KIA DEBT SERVICE

Construction Loan	\$	542,900
Less: Principal Forgiveness		0
Amortized Loan Amount	\$	542,900
Interest Rate		2.00%
Loan Term (Years)		20
Estimated Annual Debt Service	\$	33,069
Administrative Fee (0.20%)		1,086
<b>Total Estimated Annual Debt Service</b>	<b>\$</b>	<b>34,154</b>

#### V. PROJECT SCHEDULE

Bid Opening	August 2018
Construction Start	October 2018
Construction Stop	June 2019

#### VI. RATE STRUCTURE

##### A. Customers

Customers	Current	Proposed	Total
Residential	1,290	0	1,290
Commercial	239	0	239
Industrial	23	0	23
Total	1,552	0	1,552

##### B. Rates

<b>WATER</b>	Current	Prior
Date of Last Rate Increase	1/1/2018	1/1/2017
<b>City Water Rates</b>		
Rate per 4,000 Gallons	\$ 14.95	\$ 14.50
Increase %	3.1%	
Affordability Index (Rate/MHI)	0.4%	0.4%
<b>Out of City Water Rates</b>		
Rate per 4,000 Gallons	\$ 22.57	\$ 21.87
Increase %	3.2%	
Affordability Index (Rate/MHI)	0.7%	0.6%

Rates will be adjusted annually on January 1 based on the percent change in CPI-U for Water and Sewer and Trash Collection Services.

<b>SEWER</b>	<u>Current</u>	<u>Prior</u>
Date of Last Rate Increase	1/1/2018	1/1/2017
<b>City Sewer Rates</b>		
Rate per 4,000 Gallons	\$ 28.09	\$ 27.23
Increase %	3.2%	
Affordability Index (Rate/MHI)	0.8%	0.8%
<b>Out of City Sewer Rates</b>		
Rate per 4,000 Gallons	\$ 42.19	\$ 40.88
Increase %	3.2%	
Affordability Index (Rate/MHI)	1.3%	1.2%

Rates will be adjusted annually on January 1 based on the percent change in CPI-U for Water and Sewer and Trash Collection Services.

## **VII. DEMOGRAPHICS**

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 43,554 with a Median Household Income (MHI) of \$40,463. The median household income for the Commonwealth is \$44,811. The project will qualify for a 2.00% interest rate.

Year	Population				Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	2,388		25,637		June 2005	6.5%
1990	2,531	6.0%	27,205	6.1%	June 2010	9.8%
2000	2,701	6.7%	30,125	10.7%	June 2015	5.3%
2010	2,566	-5.0%	31,448	4.4%	June 2017	6.5%
Current	2,544	-0.9%	31,213	-0.7%		
Cumulative %		6.5%		21.7%		

## **VIII. FINANCIAL ANALYSIS**

Financial information was obtained from the audited financial statements for the years ended June 30, 2015 through June 30, 2017. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from operating expenses for fiscal years 2015 (-\$4,824), 2016 (-\$14,656), and 2017 (-\$29,966).

Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented

## HISTORY

Operating revenues decreased 4.0% from \$1.70 million in 2015 to \$1.63 million in 2017. Operating expenses increased 2.7% from \$1.27 million in 2015 to \$1.31 million in 2017. The debt coverage ratio was 4.2 in 2015, 4.2 in 2016, and 2.7 in 2017.

On January 1, 2017, the utility began adjusting rates for inflation using CPI-U for Water and Sewer and Trash Collection Services rather than CPI-U for South Urban. CPI-U for Water and Sewer and Trash Collection Services is generally higher than CPI-U for South Urban. The change in the index used will minimize future revenue decreases. The City's utility board is conscious of the system's finances and will recommend rate changes if needed to adequately fund the system's expenses. At this time, the system's expenses are adequately met and the debt coverage ratio exceeds KIA's requirements.

The 2017 balance sheet shows a debt coverage ratio of 2.7, current ratio of 6.1, debt to equity ratio of 0.2, 56.5 days of sales in accounts receivable, and 13.4 months of operating expenses in unrestricted cash.

## AUDIT INFORMATION

### Opinion:

2015: Unqualified  
2016: Unqualified  
2017: Unqualified

### Internal Control Over Financial Reporting:

2015: Auditor did not identify any deficiencies in internal control considered to be a material weakness.  
2016: Auditor did not identify any deficiencies in internal control considered to be a material weakness.  
2017: Auditor did not identify any deficiencies in internal control considered to be a material weakness.

### Compliance and Other Matters

2015: Auditor's tests did not disclose any instances of noncompliance or other matters required to be reported under Government Auditing Standards.  
2016: Auditor's tests did not disclose any instances of noncompliance or other matters required to be reported under Government Auditing Standards.  
2017: Auditor's tests did not disclose any instances of noncompliance or other matters required to be reported under Government Auditing Standards.

## PROJECTIONS

Projections are based on the following assumptions:

1) Since water and sewer rates are adjusted each January 1 for inflation,

- revenues are projected to increase by the inflationary estimate of 2%.
- 2) Operating expenses are projected to increase 2% each year for inflation.
  - 3) Debt service coverage is 2.3 in 2020 when principal and interest payments are expected to begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund B loan.

#### REPLACEMENT RESERVE

The replacement reserve will be 5% (\$28,000 total) of the final amount borrowed to be funded annually (\$1,400 yearly) each December 1 for 20 years and maintained for the life of the loan.

#### IX. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
KLC Capital Lease	\$ 480,000	2021
KIA A209-07	359,931	2031
KIA B17-004	463,537	2037
<b>Total</b>	<b>\$ 1,303,468</b>	

#### X. CONTACTS

<b>Legal Applicant</b>	
Name	City of Calvert City
Address	P.O. Box 36 Calvert City, KY 42029
County	Marshall
Authorized Official	Lynn Jones, Mayor
Phone	270-395-4124
Email	l.jones@calvertccc.com

<b>Project Contact - Applicant</b>	
Name	Roger Colburn
Representing	City of Calvert City
Address	P.O. Box 36 Calvert City, KY 42029
Phone	270-395-7138
Email	rcolburn@calvertcity.com

**Project Administrator**

Name	City of Calvert City
Address	P.O. Box 36 Calvert City, KY 42029
Contact	Roger Colburn
Phone	270-395-7138
Email	rcolburn@calvertcity.com

**Consulting Engineer**

Name	Charles D. McCann
Firm	Rivercrest Engineering Incorporated
Address	7020 US Highway 68 West Paducah, KY 42003
Phone	618-521-5421
Email	cmccann@rivercresteng.com

**XI. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions.

**CITY OF CALVERT CITY  
FINANCIAL SUMMARY (JUNE YEAR END)**

	<u>Audited</u> <u>2015</u>	<u>Audited</u> <u>2016</u>	<u>Audited</u> <u>2017</u>	<u>Projected</u> <u>2018</u>	<u>Projected</u> <u>2019</u>	<u>Projected</u> <u>2020</u>	<u>Projected</u> <u>2021</u>	<u>Projected</u> <u>2022</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	2,540,815	1,798,519	1,780,426	1,791,368	1,847,583	1,902,697	1,952,530	2,016,909
Other Assets	11,388,917	12,231,345	12,568,460	12,130,942	12,466,967	12,172,120	11,855,747	11,597,160
<b>Total</b>	<b>13,929,732</b>	<b>14,029,864</b>	<b>14,348,886</b>	<b>13,922,310</b>	<b>14,314,550</b>	<b>14,074,817</b>	<b>13,808,277</b>	<b>13,614,069</b>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	298,928	230,163	293,602	304,891	307,739	330,626	273,545	216,599
Long Term Liabilities	1,739,381	1,572,671	1,879,744	1,728,902	2,131,082	1,969,175	1,866,049	1,821,669
<b>Total Liabilities</b>	<b>2,038,309</b>	<b>1,802,834</b>	<b>2,173,346</b>	<b>2,033,793</b>	<b>2,438,821</b>	<b>2,299,801</b>	<b>2,139,594</b>	<b>2,038,268</b>
<b>Net Assets</b>	<b>11,891,423</b>	<b>12,227,030</b>	<b>12,175,540</b>	<b>11,888,517</b>	<b>11,875,729</b>	<b>11,775,016</b>	<b>11,668,683</b>	<b>11,575,801</b>
<b>Cash Flow</b>								
Revenues	1,695,555	1,658,089	1,626,889	1,658,402	1,690,545	1,723,331	1,756,773	1,790,884
Operating Expenses	1,272,475	1,196,257	1,306,770	1,332,905	1,359,563	1,386,754	1,415,889	1,444,179
Other Income	183,695	118,238	107,529	107,529	107,529	107,529	107,529	107,529
<b>Cash Flow Before Debt Service</b>	<b>606,775</b>	<b>580,070</b>	<b>427,648</b>	<b>433,026</b>	<b>438,511</b>	<b>444,106</b>	<b>448,413</b>	<b>454,234</b>
<b>Debt Service</b>								
Existing Debt Service	143,840	139,126	156,966	172,312	182,437	176,958	191,095	124,684
Proposed KIA Loan	0	0	0	0	0	17,077	34,154	34,154
<b>Total Debt Service</b>	<b>143,840</b>	<b>139,126</b>	<b>156,966</b>	<b>172,312</b>	<b>182,437</b>	<b>194,035</b>	<b>225,249</b>	<b>158,838</b>
<b>Cash Flow After Debt Service</b>	<b>462,935</b>	<b>440,944</b>	<b>270,682</b>	<b>260,714</b>	<b>256,074</b>	<b>250,071</b>	<b>223,164</b>	<b>295,396</b>
<b>Ratios</b>								
Current Ratio	8.5	7.8	6.1	5.9	6.0	5.8	7.1	9.3
Debt to Equity	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Days Sales in Accounts Receivable	54.8	60.6	56.5	56.5	56.5	56.5	56.5	56.5
Months Operating Expenses in Unrestricted Cash	20.7	14.9	13.4	13.6	13.8	14.0	14.1	14.3
Debt Coverage Ratio	4.2	4.2	2.7	2.5	2.4	2.3	2.0	2.9



<b>EXECUTIVE SUMMARY</b>		Reviewer	Meili Sun	
<b>KENTUCKY INFRASTRUCTURE AUTHORITY</b>		Date	September 26, 2018	
<b>FUND B, INFRASTRUCTURE</b>		KIA Loan Number	B19-004	
<b>REVOLVING LOAN FUND</b>		WRIS Number	WX21029293	
BORROWER	CITY OF MOUNT WASHINGTON BULLITT COUNTY			
BRIEF DESCRIPTION				
The City of Mount Washington is requesting a Fund B loan in the amount of \$1,599,630 for the Bardstown Road Water Main Replacement project. This project will replace 6,625 feet of old 6-inch asbestos-cement water main with a new 12-inch PVC water main to improve flow for residential and commercial customers and for the public schools. It will help with fire hydrant flow for the fire department, which has been experiencing volume problems in this part of the City. The project will also replace 114 service connections, new valves, and replace 14 old fire hydrants.				
PROJECT FINANCING		PROJECT BUDGET		
Fund B Loan	\$1,599,630	Administrative Expenses	RD Fee %	Actual %
		Eng - Design / Const	8.3%	8.2%
		Eng - Insp	5.2%	3.3%
		Construction		
		Contingency		
TOTAL	\$1,599,630	TOTAL		\$1,599,630
REPAYMENT	Rate	3.00%	Est. Annual Payment	\$110,141
	Term	20 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	Kentucky Engineering Group, PLLC		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	Nov-18		
	Construction Start	Nov-18		
	Construction Stop	Jul-19		
DEBT PER CUSTOMER	Existing	\$1,142		
	Proposed	\$1,364		
OTHER DEBT	See Attached			
RESIDENTIAL RATES		Users	Avg. Bill	
	Current	9,855	\$29.88 (for 4,000 gallons)	
	Additional	0	\$29.88 (for 4,000 gallons)	
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2015	2,166,275	1,049,642	1,116,633	2.1
Audited 2016	2,740,658	1,397,959	1,342,699	2.0
Audited 2017	2,641,961	1,226,542	1,415,419	2.2
Projected 2018	2,866,203	1,341,015	1,525,189	2.1
Projected 2019	3,102,453	1,216,556	1,885,898	2.6
Projected 2020	3,338,684	1,510,526	1,828,159	2.2
Projected 2021	3,600,672	1,563,118	2,037,554	2.3
Projected 2022	3,876,442	1,564,887	2,311,555	2.5

Reviewer: Meili Sun  
Date: September 26, 2018  
Loan Number: B19-004

**KENTUCKY INFRASTRUCTURE AUTHORITY  
INFRASTRUCTURE REVOLVING LOAN FUND (FUND B)  
CITY OF MOUNT WASHINGTON, BULLITT COUNTY  
PROJECT REVIEW  
WX21029293**

**I. PROJECT DESCRIPTION**

The City of Mount Washington is requesting a Fund B loan in the amount of \$1,599,630 for the Bardstown Road Water Main Replacement project. This project will replace 6,625 feet of old 6-inch asbestos-cement water main with a new 12-inch PVC water main to improve flow for residential and commercial customers and for the public schools. This will help with fire hydrant flow for the fire department, which has been experiencing volume problems in this part of the City. The project will also replace 114 service connections, new valves, and replace 14 old fire hydrants.

**II. PROJECT BUDGET**

	<u>Total</u>
Engineering Fees – Design	\$ 101,740
Engineering Fees – Construction	15,900
Engineering Fees – Inspection	48,000
Construction	1,303,590
Contingency	130,400
<b>Total</b>	<b>\$ 1,599,630</b>

**III. PROJECT FUNDING**

	<u>Amount</u>	<u>%</u>
KIA Fund B Loan	\$ 1,599,630	100
<b>Total</b>	<b>\$ 1,599,630</b>	<b>100</b>

**IV. KIA DEBT SERVICE**

Amortized Loan Amount	\$ 1,599,630
Interest Rate	3.00%
Loan Term	20
Estimated Annual Debt Service	\$ 106,942
Administrative Fee (0.20%)	3,199
<b>Annual Debt Service</b>	<b>\$ 110,141</b>

**V. PROJECT SCHEDULE**

Bid Opening	November 2018
Construction Start	November 2018
Construction Stop	July 2019

**VI. RATE STRUCTURE**

**A. Customers**

Customers	Current
Residential	9,349
Commercial	506
Total	9,855

**B. Rates**

Date of Rate Increase	City Water		Rural Water		Sewer	
	Current	Prior	Current	Prior	Current	Prior
	07/01/18	07/01/17	07/01/18	07/01/17	07/01/18	07/01/17
First 2,499 Gallons	\$21.60	\$20.71	24.17	23.17	\$21.60	\$20.71
Over 2,499 Gallons	5.52	5.20	6.87	6.59	5.52	5.20
Cost for 4,000 gallons	\$29.88	\$28.51	\$34.48	\$33.06	\$29.88	\$28.51
Increase %	4.8%		4.3%		4.8%	
Affordability Index (Rate/MHI)	0.5%		0.6%		0.5%	

**VII. DEMOGRAPHICS**

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility’s service area population was 19,320 with a Median Household Income (MHI) of \$65,331. The median household income for the Commonwealth is \$44,881. The project will qualify for a 3.00% interest rate.

Year	Population		County		County Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	3,997		43,346		June 2005	5.4%
1990	5,226	30.7%	47,567	9.7%	June 2010	14.4%
2000	8,485	62.4%	61,236	28.7%	June 2015	5.8%
2010	9,117	7.4%	74,319	21.4%	June 2018	5.1%
Current	14,088	54.5%	77,727	4.6%		
Cumulative %		252.5%		79.3%		

## **VIII. FINANCIAL ANALYSIS**

Financial information was obtained from the audited financial statements for the years ended June 30, 2015 through June 30, 2017. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2015, 2016, and 2017 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

### **HISTORY**

Combined water and sewer revenues went up 21.0% from \$6.4 million in 2015 to \$7.7 million in 2017 due to previously approved rate increases and volume increase. Operating expenses increased 21.1% from \$4.2 million to \$5.1 million during the same period due to higher water purchase, personnel, and maintenance/repair costs. Debt coverage ratio was 2.1, 2.0, and 2.2 in 2015, 2016, and 2017 respectively.

The balance sheet reflects a current ratio of 7.6, debt to equity ratio of 0.8, 29.2 days sales in accounts receivable, and 22.7 months of operating expenses in unrestricted cash.

### **PROJECTIONS**

Projections are based on the following assumptions:

- 1) Combined revenues will go up automatically each year based on the Louisville Water Company's wholesale rate and the Consumer Pricing Index. The estimated increase is 4.3%.
- 2) The City purchases water exclusively from the Louisville Water Company. The history of wholesale rates indicates an average of 2.3% increase each year.
- 3) Operating expenses other than water purchase will increase 2% annually for general inflation.
- 4) In June, 2018, the City used available cash to pay off KIA B11-05 loan prior its 2034 maturity date. Debt coverage ratio is 2.3 in 2021 when full year principal and interest repayments begin. The calculation excluded B11-05 loan balance in the amount of \$121,108.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund B loan.

### **REPLACEMENT RESERVE**

The replacement reserve will be 5% (\$80,000 total) of the final amount borrowed to be funded annually (\$4,000 yearly) each December 1 for 20 years and maintained for the life of the loan.

**IX. DEBT OBLIGATIONS**

	<u>Outstanding</u>	<u>Maturity</u>
2012 Series Bonds	\$ 3,475,420	2023
KIA A09-03 Loan	7,653,638	2033
KIA B11-05 Loan i.a.o. \$121,108 paid off		2034
KIA C17-002 Loan i.a.o. \$3,437,500		TBD
	<b>\$ 11,129,058</b>	

**X. CONTACTS**

<b>Legal Applicant</b>	
Name	City of Mount Washington
Address	275 Snapp St, PO Box 285 Mount Washington, KY 40047
County	Bullitt
Authorized Official	Barry Armstrong, Mayor
Phone	(502) 538-4216
Email	barmstrong@mtwky.org

<b>Project Contact - Applicant</b>	
Name	Ronnie Fick
Representing	City of Mount Washington
Address	275 Snapp St, PO Box 285 Mount Washington, KY 40047
Phone	(502) 538-3771
Email	rfick@mtwky.org

<b>Project Administrator</b>	
Name	Kentucky Engineering Group, PLLC
Address	PO Box 1034 Versailles, KY 40383
Contact	Holly Nicholas
Phone	(859) 333-9742
Email	hnicholas@kyengr.com

**Consulting Engineer**

Name	Robert E Taylor, Jr
Firm	Kentucky Engineering Group, PLLC
Address	PO Box 1034 Versailles, KY 40383
Phone	(859) 251-4127
Email	rtaylor@kyengr.com

**XI. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions.

**CITY OF MOUNT WASHINGTON  
FINANCIAL SUMMARY (JUNE YEAR END)**

	<u>Audited</u> <u>2015</u>	<u>Audited</u> <u>2016</u>	<u>Audited</u> <u>2017</u>	<u>Projected</u> <u>2018</u>	<u>Projected</u> <u>2019</u>	<u>Projected</u> <u>2020</u>	<u>Projected</u> <u>2021</u>	<u>Projected</u> <u>2022</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	8,066,443	9,284,018	10,356,823	11,908,495	13,821,992	15,678,951	17,746,605	20,089,560
Other Assets	25,369,821	24,754,780	24,725,206	24,478,620	28,590,338	30,924,534	31,728,436	32,778,939
<b>Total</b>	<b>33,436,264</b>	<b>34,038,798</b>	<b>35,082,029</b>	<b>36,387,114</b>	<b>42,412,330</b>	<b>46,603,485</b>	<b>49,475,041</b>	<b>52,868,499</b>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	1,660,776	1,438,418	1,355,094	1,371,282	1,401,260	1,427,269	1,458,170	1,485,126
Long Term Liabilities	14,379,695	14,126,290	14,031,148	13,087,537	15,437,228	16,166,280	15,150,781	14,113,526
<b>Total Liabilities</b>	<b>16,040,471</b>	<b>15,564,708</b>	<b>15,386,242</b>	<b>14,458,819</b>	<b>16,838,488</b>	<b>17,593,549</b>	<b>16,608,951</b>	<b>15,598,652</b>
<b>Net Assets</b>	<b>17,395,793</b>	<b>18,474,090</b>	<b>19,695,787</b>	<b>21,928,295</b>	<b>25,573,842</b>	<b>29,009,936</b>	<b>32,866,090</b>	<b>37,269,847</b>
<b>Cash Flow</b>								
Revenues	6,362,320	7,255,455	7,703,943	8,035,212	8,380,726	8,741,098	9,116,965	9,508,994
Operating Expenses	4,243,894	4,582,239	5,143,015	5,250,042	5,359,306	5,483,447	5,597,326	5,713,585
Other Income	47,849	67,442	81,033	81,033	81,033	81,033	81,033	81,033
<b>Cash Flow Before Debt Service</b>	<b>2,166,275</b>	<b>2,740,658</b>	<b>2,641,961</b>	<b>2,866,203</b>	<b>3,102,453</b>	<b>3,338,684</b>	<b>3,600,672</b>	<b>3,876,442</b>
<b>Debt Service</b>								
Existing Debt Service	1,049,642	1,397,959	1,226,542	1,341,015	1,216,556	1,455,455	1,452,977	1,454,746
Proposed KIA Loan	0	0	0	0	0	55,071	110,141	110,141
<b>Total Debt Service</b>	<b>1,049,642</b>	<b>1,397,959</b>	<b>1,226,542</b>	<b>1,341,015</b>	<b>1,216,556</b>	<b>1,510,526</b>	<b>1,563,118</b>	<b>1,564,887</b>
<b>Cash Flow After Debt Service</b>	<b>1,116,633</b>	<b>1,342,699</b>	<b>1,415,419</b>	<b>1,525,189</b>	<b>1,885,898</b>	<b>1,828,159</b>	<b>2,037,554</b>	<b>2,311,555</b>
<b>Ratios</b>								
Current Ratio	4.9	6.5	7.6	8.7	9.9	11.0	12.2	13.5
Debt to Equity	0.9	0.8	0.8	0.7	0.7	0.6	0.5	0.4
Days Sales in Accounts Receivable	22.0	38.5	29.2	29.2	29.2	29.2	29.2	29.2
Months Operating Expenses in Unrestricted Cash	21.7	22.3	22.7	25.7	29.4	32.9	36.6	40.7
Debt Coverage Ratio	2.1	2.0	2.2	2.1	2.6	2.2	2.3	2.5

<b>EXECUTIVE SUMMARY</b>		Reviewer	Ashley Adams	
<b>KENTUCKY INFRASTRUCTURE AUTHORITY</b>		Date	September 27, 2018	
<b>FUND F, FEDERALLY ASSISTED DRINKING WATER</b>		KIA Loan Number	F18-005 (Increase)	
<b>REVOLVING LOAN FUND</b>		WRIS Number	WX21217027	
<b>BORROWER</b>		GREEN-TAYLOR WATER DISTRICT TAYLOR COUNTY		
<b>BRIEF DESCRIPTION</b>				
This is a Director Level Increase in the amount of \$121,319. The need for the increase is due to bids coming in higher than expected in the original budget estimate.				
Original Project Description: This project will replace problematic mains and utilize loops in order to allow for better water turnover and the elimination of disinfection byproducts. Two new loops will be created, one around HWY 323 and another around Bloyds Poplar Grove Road, and an existing loop will be updated on Old Greensburg Road. There will also be improvements in the Summersville community and the Shalawn subdivision where there have been line breaks and considerable water loss. This project as a whole will improve service to over 200 customers as well as provide service to around 42 new customers who have requested water service for several years.				
<b>PROJECT FINANCING</b>		<b>PROJECT BUDGET</b>		
Fund F Loan	\$1,963,390	RD Fee %	Actual %	
		Administrative Expenses		\$10,000
		Legal Expenses		10,000
		Planning		75,000
		Eng - Design / Const	8.0%	7.5%
		Eng - Insp	4.9%	4.6%
		Construction		1,515,197
		Contingency		151,520
<b>TOTAL</b>	<b>\$1,963,390</b>	<b>TOTAL</b>		<b>\$1,963,390</b>
<b>REPAYMENT</b>	Rate	1.75%	Est. Annual Payment	\$121,682
	Term	20 Years	1st Payment	6 Mo. after first draw
<b>PROFESSIONAL SERVICES</b>	Engineer	Cann-Tech, LLC		
	Bond Counsel	Dinsmore & Shohl, LLP		
<b>PROJECT SCHEDULE</b>	Bid Opening	Sep-18		
	Construction Start	Nov-18		
	Construction Stop	May-19		
<b>DEBT PER CUSTOMER</b>	Existing	\$692		
	Proposed	\$989		
<b>OTHER DEBT</b>	See Attached			
<b>OTHER STATE-FUNDED PROJECTS LAST 5 YRS</b>	See Attached			
<b>RESIDENTIAL RATES</b>		<u>Users</u>	<u>Avg. Bill</u>	
	Current	4,945	\$40.73	(for 4,000 gallons)
	Additional	42	\$40.73	(for 4,000 gallons)
<b>REGIONAL COORDINATION</b>	This project is consistent with regional planning recommendations.			
<b>CASHFLOW</b>	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2015	370,054	348,498	21,556	1.1
Audited 2016	457,813	352,823	104,990	1.3
Audited 2017	529,596	365,685	163,911	1.4
Projected 2018	491,753	371,351	120,402	1.3
Projected 2019	657,964	333,990	323,974	2.0
Projected 2020	613,692	457,722	155,970	1.3
Projected 2021	573,533	446,121	127,412	1.3
Projected 2022	532,571	446,121	86,450	1.2



Reviewer: Ashley Adams  
Date: September 27, 2018  
Loan Number: F18-005 (Increase)

**KENTUCKY INFRASTRUCTURE AUTHORITY  
DRINKING WATER STATE REVOLVING FUND (FUND F)  
GREEN-TAYLOR WATER DISTRICT, GREEN COUNTY  
PROJECT REVIEW  
WX21217027**

**I. PROJECT DESCRIPTION**

The Green-Taylor Water District is requesting a Fund F loan increase in the amount of \$121,319 because bids were higher than expected in the original budget estimate. The total amount is \$1,963,390 for the System Improvements in the Taylor County project. Because the increase request is below 10% of the original loan amount, the increase has been approved by the Executive Director of KIA.

Original Project Description:

This project will replace problematic mains and utilize loops in an effort to improve service to existing customers, eliminate disinfection byproducts, and provide service to around 42 new customers. Two new loops will be created around HWY 323 and another around Bloyds Poplar Grove Road and an existing loop will be updated on Old Greensburg Road. A four inch water main will be replaced by six inch PVC line that serves the Summersville Community and the lines in the Shalawn subdivision will be replaced in order to address line breaks and substantial water loss in the area. A new line will be ran on Black Snake Creek Road in order to provide water service to citizens who have requested water service for several years. The District will also purchase two portable generators to be used in emergency situations. In addition, the District will create a Capital Improvement Plan in order to plan for future projects. This planning will utilize GPS to locate over 5,000 valves as well as meters and hydrants.

Green-Taylor Water District is a PSC regulated regional provider currently serving nearly 5,000 residents and businesses mainly in Green and Taylor counties. The District purchases approximately 350 MG of water from three providers including Campbellsville Municipal Water & Sewer System, Green River Valley Water District, and the Greensburg Water Department.

## II. PROJECT BUDGET

	<u>Total</u>
Administrative Expenses	\$ 10,000
Legal Expenses	10,000
Planning	75,000
Engineering Fees - Design	87,291
Engineering Fees - Construction	37,410
Engineering Fees - Inspection	76,972
Construction	1,515,197
Contingency	151,520
<b>Total</b>	<b>\$ 1,963,390</b>

## III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund F Loan	\$ 1,963,390	100%
<b>Total</b>	<b>\$ 1,963,390</b>	<b>100%</b>

## IV. KIA DEBT SERVICE

Construction Loan	\$ 1,963,390
Less: Principal Forgiveness	0
Amortized Loan Amount	\$ 1,963,390
Interest Rate	1.75%
Loan Term (Years)	20
Estimated Annual Debt Service	\$ 116,774
Administrative Fee (0.25%)	4,908
<b>Total Estimated Annual Debt Service</b>	<b>\$ 121,682</b>

## V. PROJECT SCHEDULE

Bid Opening	September 2018
Construction Start	November 2018
Construction Stop	May 2019

## VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

### A) Customers

	<u>Current</u>	<u>Proposed</u>	<u>Total</u>
Residential	4,878	42	4920
Commercial	67		67
<b>Total</b>	<b>4,945</b>	<b>42</b>	<b>4,987</b>

**B) Rates**

	Current	Prior
Date of Last Rate Increase	08/17/18	12/01/10
Minimum (2,000 Gallons)	\$22.21	\$20.40
Next 3,000 Gallons	9.26	8.50
Next 5,000 Gallons	7.40	6.80
Over 10,000 Gallons	4.71	4.33
Cost for 4,000 gallons	\$40.73	\$37.40
Increase %	9%	22%
Affordability Index (Rate/MHI)	1.3%	1.2%

**VII. DEMOGRAPHICS**

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility is located in Greensburg (Green County) and has a servable population of 11,334 with a Median Household Income (MHI) of \$37,272. The median household income for the Commonwealth is \$44,811. The project will qualify for a 1.75% interest rate based on their status as a regional provider and the project’s intent to address an Agreed Order.

Year	Population		County Unemployment	
	County	% Change	Date	Rate
1980	11,043		June 2005	6.8%
1990	10,371	-6.1%	June 2010	11.1%
2000	11,518	11.1%	June 2015	5.7%
2010	11,258	-2.3%	June 2018	5%
Current	11,123	-1.2%		
Cumulative %		0.7%		

**VIII. 2017 CAPITALIZATION GRANT EQUIVALENCIES**

- 1) Green Project Reserve - The Drinking Water capitalization grant does not contain a “green” requirement.
- 2) Additional Subsidization – This project does not qualify for additional subsidization.

**IX. FINANCIAL ANALYSIS**

Financial information was obtained from the audited financial statements for the years ended December 31, 2015 through December 31, 2017. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2015, 2016, and 2017 operating expenses. Percentage references in the History

section below are based on whole dollar amounts and not the rounded amounts presented

## HISTORY

Revenues increased 3.3% from \$2.3 million in 2015 to \$2.4 million in 2017. Operating expenses decreased 4.1% from \$1.9 million to \$1.8 million during the same time period. The debt coverage ratio was 1.1 in 2015, 1.3 in 2016, and 1.4 in 2017.

The balance sheet reflects a current ratio of 5.1, a debt to equity ratio of 0.6, 69.1 days sales in accounts receivable, and 4.1 months operating expenses in unrestricted cash.

## PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues will increase 9% in 2019 as a result of a rate increase approved by PSC on August 17, 2018.
- 2) Operating expenses will increase 2% for inflation.
- 3) Debt service coverage is 1.3 in 2020 when principal and interest repayments begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund F loan.

## REPLACEMENT RESERVE

The replacement reserve will be 5% (\$98,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$4,900 yearly) each December 1 for 20 years and maintained for the life of the loan.

## X. DEBT OBLIGATIONS

	Outstanding	Maturity
1979 Revenue Bond	\$ 75,000	2019
1994 Revenue Bond	312,000	2034
1995 Revenue Bond	473,000	2035
2001 Revenue Bond	205,000	2041
2004 Series A Revenue Bond	568,000	2044
2004 Series B Revenue Bond	248,000	2044
2004 Refinance Bonds	1,487,000	2027
Bank Loan (Capital Purchases)	53,619	2021
<b>Total</b>	<b>\$ 3,421,619</b>	

## **XI. CONTACTS**

### **Legal Applicant**

Entity Name	Green-Taylor Water District
Authorized Official	Ken Ferguson (Chairman)
County	Taylor
Email	josh.pedigo.greentaylorwater@hotmail.com
Phone	270-932-1834
Address	PO Box 168 Greensburg, KY 42743

### **Applicant Contact**

Name	Josh Pedigo
Organization	Green-Taylor Water District
Email	josh.pedigo.greentaylorwater@hotmail.com
Phone	270-932-4947
Address	250 Industrial Park Rd Greensburg, KY 42743

### **Project Administrator**

Name	Adam Scott
Organization	Cann-Tech, LLC
Email	ascott@kih.net
Phone	502-859-0907
Address	1100 Glensboro Rd Lawrenceburg, KY 40342

### **Consulting Engineer**

PE Name	Matthew Aaron Baker
Firm Name	Cann-Tech, LLC
Email	mbaker@kih.net
Phone	502-859-0907
Address	1100 Glensboro Rd Lawrenceburg, KY 40342

## **XII. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions.

**GREEN-TAYLOR WATER DISTRICT  
FINANCIAL SUMMARY (DECEMBER YEAR END)**

	<u>Audited</u> <u>2015</u>	<u>Audited</u> <u>2016</u>	<u>Audited</u> <u>2017</u>	<u>Projected</u> <u>2018</u>	<u>Projected</u> <u>2019</u>	<u>Projected</u> <u>2020</u>	<u>Projected</u> <u>2021</u>	<u>Projected</u> <u>2022</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	1,062,218	1,343,863	1,224,494	1,236,513	1,340,108	1,371,302	1,396,785	1,483,235
Other Assets	11,858,101	11,782,360	12,223,681	13,400,174	13,284,352	13,034,127	12,761,055	12,386,054
<b>Total</b>	<b>12,920,319</b>	<b>13,126,223</b>	<b>13,448,175</b>	<b>14,636,687</b>	<b>14,624,460</b>	<b>14,405,429</b>	<b>14,157,840</b>	<b>13,869,289</b>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	227,206	252,075	242,302	244,195	246,540	248,993	251,411	239,705
Long Term Liabilities	4,664,472	4,631,262	4,585,113	5,691,137	5,460,402	5,257,814	5,044,408	5,055,908
<b>Total Liabilities</b>	<b>4,891,678</b>	<b>4,883,337</b>	<b>4,827,415</b>	<b>5,935,332</b>	<b>5,706,942</b>	<b>5,506,807</b>	<b>5,295,819</b>	<b>5,295,613</b>
<b>Net Assets</b>	<b>8,028,641</b>	<b>8,242,886</b>	<b>8,620,760</b>	<b>8,701,355</b>	<b>8,917,518</b>	<b>8,898,622</b>	<b>8,862,021</b>	<b>8,573,676</b>
<b>Cash Flow</b>								
Revenues	2,313,573	2,349,976	2,389,718	2,389,718	2,594,529	2,594,529	2,594,529	2,594,529
Operating Expenses	1,973,527	1,928,351	1,892,138	1,929,981	1,968,581	2,012,853	2,053,012	2,093,974
Other Income	30,008	36,188	32,016	32,016	32,016	32,016	32,016	32,016
<b>Cash Flow Before Debt Service</b>	<b>370,054</b>	<b>457,813</b>	<b>529,596</b>	<b>491,753</b>	<b>657,964</b>	<b>613,692</b>	<b>573,533</b>	<b>532,571</b>
<b>Debt Service</b>								
Existing Debt Service	348,498	352,823	365,685	371,351	333,990	336,040	324,439	324,439
Proposed KIA Loan	0	0	0	0	0	121,682	121,682	121,682
<b>Total Debt Service</b>	<b>348,498</b>	<b>352,823</b>	<b>365,685</b>	<b>371,351</b>	<b>333,990</b>	<b>457,722</b>	<b>446,121</b>	<b>446,121</b>
<b>Cash Flow After Debt Service</b>	<b>21,556</b>	<b>104,990</b>	<b>163,911</b>	<b>120,402</b>	<b>323,974</b>	<b>155,970</b>	<b>127,412</b>	<b>86,450</b>
<b>Ratios</b>								
Current Ratio	4.7	5.3	5.1	5.1	5.4	5.5	5.6	6.2
Debt to Equity	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6
Days Sales in Accounts Receivable	57.7	70.5	69.1	69.1	69.1	69.1	69.1	69.1
Months Operating Expenses in Unrestricted Cash	3.6	4.9	4.1	4.2	4.5	4.6	4.6	5.1
Debt Coverage Ratio	1.1	1.3	1.4	1.3	2.0	1.3	1.3	1.2