

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

• **Fund A Loan**

<u>Loan #</u>	<u>Borrower</u>	<u>Loan Amount</u>	<u>County</u>
A17-001	Augusta Regional Sewer Authority (with P&D loan)	\$ 6,297,000	Bracken
A18-003	City of Marion (with P&D loan)	\$ 5,388,790	Crittenden
A18-007	Regional Water Resource Agency	\$ 2,047,000	Daviess
A18-010	Oldham County Environmental Authority	\$ 2,000,000	Oldham
A18-022	Paducah McCracken Joint Sewer Agency	\$ 625,000	McCracken

• **Fund B Loan**

<u>Loan #</u>	<u>Borrower</u>	<u>Loan Amount</u>	<u>County</u>
B18-009	Hopkinsville Electric System	\$ 2,500,000	Christian
B18-010	Marion County Water District	\$ 950,000	Marion
B18-011	Cannonsburg Water District	\$ 85,000	Boyd

• **Fund C Loan**

<u>Loan #</u>	<u>Borrower</u>	<u>Loan Amount</u>	<u>County</u>
C12-01	MuniNet Fiber Agency (Increase)	\$ 3,687,049	McCracken
C18-008	Hopkinsville Electric System	\$ 1,800,000	Christian

• **Fund F Loan**

<u>Loan #</u>	<u>Borrower</u>	<u>Loan Amount</u>	<u>County</u>
F15-002	Monroe County Water District (Increase)	\$ 15,675,679	Monroe
F18-002	City of Salyersville (with P&D loan)	\$ 705,982	Magoffin

EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND A, FEDERALLY ASSISTED WASTEWATER REVOLVING LOAN FUND		Reviewer Date KIA Loan Number WRIS Number	Ashley Adams October 5, 2017 A17-001 SX21023005
BORROWER	AUGUSTA REGIONAL SEWER AUTHORITY BRACKEN COUNTY		
BRIEF DESCRIPTION			
This project is the construction portion of a prior Planning and Design loan (A114-015) for \$600,000 by KIA which will help fund the creation of a new Single Stage Activated Sludge Wastewater Treatment Plant (WWTP). This regional plant will serve the cities of Augusta, Brooksville, and Northern Bracken County based upon the recommendations of the Facilities Plan approved in 2010. The project will also construct a new outfall and four lift stations.			
PROJECT FINANCING		PROJECT BUDGET	RD Fee % Actual %
Fund A Loan	\$5,697,000	Administrative Expenses	\$80,000
HB 380	100,000	Legal Expenses	65,000
Rural Development	6,000,000	Land, Easements	220,000
KIA A1 14-015 P&D	600,000	Planning	45,000
		Eng - Design / Const	6.4% 5.8% 594,000
		Eng - Insp	4.1% 3.4% 345,000
		Eng - Other	155,500
		Construction	9,277,000
		Contingency	920,500
		Other	695,000
TOTAL	\$12,397,000	TOTAL	\$12,397,000
REPAYMENT	Rate Term	0.25% 30 Years	Est. Annual Payment 1st Payment 6 Mo. after first draw \$182,989
PROFESSIONAL SERVICES	Engineer Bond Counsel	HMB Professional Engineers Inc Dinsmore & Shohl, LLP	
PROJECT SCHEDULE	Bid Opening Construction Start Construction Stop	Sep-18 Nov-18 Nov-20	
DEBT PER CUSTOMER	Existing Proposed	\$0 \$9,658	
OTHER DEBT	See Attached		
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached		
RESIDENTIAL RATES	Current Additional	Users 860 81	Avg. Bill \$59.00 (for 4,000 gallons) \$59.00 (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
Initiation of Operation 2021	351,907	91,495	260,413 3.8
Projected 2022	345,066	182,989	162,077 1.9
Projected 2023	388,089	333,772	54,317 1.2
Projected 2024	380,971	333,772	47,199 1.1
Projected 2025	373,712	333,772	39,940 1.1

Reviewer: Ashley Adams
Date: October 5, 2017
Loan Number: A17-001

**KENTUCKY INFRASTRUCTURE AUTHORITY
WASTEWATER REVOLVING LOAN FUND (FUND A)
AUGUSTA REGIONAL SEWER AUTHORITY, BRACKEN COUNTY
PROJECT REVIEW
SX21023005**

I. PROJECT DESCRIPTION

The Augusta Regional Sewer Authority (ARSA) is requesting a Fund A loan in the amount of \$5,697,000 for the Augusta/Brooksville Regional Sewer project. ARSA was established by ordinance in 2014 in an effort to regionalize wastewater treatment in an area of Bracken County which includes the Cities of Augusta and Brooksville and unserved citizens in the County between those cities. ARSA was created as a joint sewer agency pursuant to KRS 76.232. The Authority is comprised of five individuals (directors): one appointed by the Bracken County Judge Executive, two by the Mayor of Augusta, and two by the Mayor of Brooksville.

This project is the construction portion of a prior Planning and Design loan (A114-015) for \$600,000 by KIA which will help fund the creation of a new Single Stage Activated Sludge Wastewater Treatment Plant (WWTP). This regional plant will serve the cities of Augusta, Brooksville, and Northern Bracken County based upon the recommendations of the Facilities Plan approved in 2010. The project will also construct a new outfall and four lift stations.

The existing WWTPs for both Augusta and Brooksville are in severe disrepair and will both be eliminated as a result of this project. In addition, a package treatment plant located at a nursing home in the county will be eliminated. The project will extend service to over 80 new customers in the county who were previously unserved with the potential to pick up more as Bracken County's population continues to grow.

In addition to those new customers, Augusta Regional Sewer Authority will serve approximately 775 existing residential customers as well as 102 commercial and industrial customers in Bracken County. KIA has extended \$1.3 million in principal forgiveness to see this project come to fruition and USDA Rural Development hopes to be able to extend another \$2 million in grant money (in addition to their loan) in the future (this funding has not yet been secured).

II. PROJECT BUDGET

	<u>Total</u>
Administrative Expenses	\$ 80,000
Legal Expenses	65,000
Land, Easements	220,000
Engineering Fees - Design / Const	594,000
Engineering Fees - Inspection	345,000
Engineering Fees - Other	155,500
Construction	9,277,000
Contingency	920,500
Other	695,000
Total	\$ 12,397,000

III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund A Loan	\$ 5,697,000	46%
Rural Development	6,000,000	48%
HB 380	100,000	1%
Planning & Design Loan (A1 14-015)	600,000	5%
Total	\$ 12,397,000	100%

IV. KIA DEBT SERVICE

Construction Loan	\$ 5,697,000
Planning & Design Loan (A1 14-015)	600,000
Less: Principal Forgiveness	1,300,000
Amortized Loan Amount	\$ 4,997,000
Interest Rate	0.25%
Loan Term (Years)	30
Estimated Annual Debt Service	\$ 172,995
Administrative Fee (0.20%)	9,994
Total Estimated Annual Debt Service	\$ 182,989

V. PROJECT SCHEDULE

Bid Opening	September 2018
Construction Start	November 2018
Construction Stop	November 2020

VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

A) Customers

Customers	Current (Augusta)	Current (Brooksville)	Proposed	Total
Residential	501	252	80	843
Commercial/Industrial	48	59	1	108
Total	549	311	91	951

B) Rates

	Proposed
Minimum (2,000 Gallons)	\$43.50
All over 2,000 (per 1,000)	7.75
Cost for 4,000 gallons	\$59.00
Affordability Index (Rate/MHI)	2.9%

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2011-2015, the Utility's service area population was approximately 1800 people when considering the Cities of Brooksville, Augusta, and those gaining service in the county. The average Median Household Income (MHI) of the two cities is \$24,620. The median household income for the Commonwealth is \$43,740. The project will qualify for a 0.25% interest rate based on MHI.

Year	Population						County Unemployment	
	City (Augusta)	% Change	City (Brooksville)	% Change	County	% Change	Date	Rate
1980	1,455		680		7,738		June 2005	6.1%
1990	1,336	-8.2%	670	-1%	7,766	0.4%	June 2010	10.9%
2000	1,204	-9.9%	589	-12%	8,279	6.6%	June 2015	6.1%
2010	1,190	-1.2%	642	9%	8,488	2.5%	June 2016	5.9%
Current	1,102	-7.4%	536	-17%	8,425	-0.7%		
Cumulative %		-24.3%		-21.2%		8.9%		

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 qualifies for additional subsidization not to exceed \$1,300,000.

IX. FINANCIAL ANALYSIS

This is a new utility and there is no financial history. Revenues and expenses in this analysis are based on estimates calculated by the engineering firm designing the project. Audited financial statements will be required annually once ARSA enters into an Assistance Agreement with KIA.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues will be sufficient to fund debt service, required reserves, operating expenses, and a 1.1 debt coverage ratio.
- 2) Expected new user revenue (\$64,744) was reduced by 30% (\$45,321) to take into account possible changes in the future as the project develops.
- 3) Proposed rates will be increased to generate approximately \$50,000 (7%) more in additional annual revenue to accommodate combined RD and KIA debt service requirements.
- 4) Expenses are based on a budget developed by the engineering firm at the point of Initiation of Operation. Operating expenses will increase 2% annually for inflation thereafter.
- 5) Debt service for the Rural Development loan will not begin until two years after the initiation of operation (assumed to be 2021). Rates will be adjusted accordingly to maintain a minimum 1.1 debt coverage ratio.
- 6) Debt service coverage is 1.9 in 2022 when full KIA principal and interest repayments begin.

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

REPLACEMENT RESERVE

The replacement reserve will be 5% (\$314,000) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$15,700) each December 1 over 20 years and maintained for the life of the loan.

X. DEBT OBLIGATIONS

None

XI. CONTACTS

Legal Applicant	
Name	Randall Smith
Address	PO Box 85 Augusta, KY 41002
County	Bracken
Authorized Official	Chairman
Phone	606-402-0539
Email	ransmith@windstream.net

Project Administrator	
Name	BTADD
Address	201 Government Street, Suite 300 Maysville, KY 41056
Contact	Kristie Dodge
Phone	606-564-6894
Email	kdodge@btadd.com

Consulting Engineer	
Name	Raymond C. Bascom
Firm	HMB Professional Engineers, Inc
Address	3 HMB Circle Frankfort, KY 40601
Phone	502-695-9800
Email	rbascom@hmbpe.com

XII. RECOMMENDATIONS

KIA staff recommends approval of the loan with the standard conditions and the following special conditions:

1. The borrower must secure full project funding for the balance of the project since the proposed funding with Rural Development has not been approved yet.
2. Augusta Regional Sewer Authority shall approve a Rate Ordinance which specifies user rates and the date that billings will commence. Rates will be sufficient to cover anticipated operating expenses, debt service, reserve requirements, and a minimum 1.1 debt coverage ratio for the system.

**AUGUSTA REGIONAL SEWER AUTHORITY
FINANCIAL SUMMARY (JUNE YEAR END)**

	Initiation of Operation <u>2021</u>	Projected <u>2022</u>	Projected <u>2023</u>	Projected <u>2024</u>	Projected <u>2025</u>
Balance Sheet					
Assets					
Current Assets	52,083	154,698	170,361	179,801	187,789
Other Assets	12,736,981	12,528,143	12,255,353	11,976,870	11,692,578
Total	<u>12,789,064</u>	<u>12,682,841</u>	<u>12,425,714</u>	<u>12,156,671</u>	<u>11,880,367</u>
Liabilities & Equity					
Current Liabilities	91,495	353,772	358,772	358,772	358,772
Long Term Liabilities	8,997,000	8,905,506	8,571,734	8,237,962	7,904,190
Total Liabilities	<u>9,088,495</u>	<u>9,259,278</u>	<u>8,930,506</u>	<u>8,596,734</u>	<u>8,262,962</u>
Net Assets	<u>3,700,569</u>	<u>3,423,563</u>	<u>3,495,209</u>	<u>3,559,937</u>	<u>3,617,406</u>
Cash Flow					
Revenues	731,907	731,907	781,907	781,907	781,907
Operating Expenses	380,000	386,841	393,819	400,936	408,195
Cash Flow Before Debt Service	351,907	345,066	388,089	380,971	373,712
Debt Service					
RD Debt Service	0	0	150,783	150,783	150,783
Proposed KIA Loan	91,495	182,989	182,989	182,989	182,989
Total Debt Service	<u>91,495</u>	<u>182,989</u>	<u>333,772</u>	<u>333,772</u>	<u>333,772</u>
Cash Flow After Debt Service	<u>260,413</u>	<u>162,077</u>	<u>54,317</u>	<u>47,199</u>	<u>39,940</u>
Ratios					
Current Ratio	0.6	0.4	0.5	0.5	0.5
Debt to Equity	2.5	2.7	2.6	2.4	2.3
Days Sales in Accounts Receivable	35.0	35.0	35.0	35.0	35.0
Months Operating Expenses in Unrestricted Cash	1.8	2.9	3.3	3.5	3.7
Debt Coverage Ratio	3.8	1.9	1.2	1.1	1.1

EXECUTIVE SUMMARY		Reviewer	Meili Sun	
KENTUCKY INFRASTRUCTURE AUTHORITY		Date	June 12, 2018	
FUND A, FEDERALLY ASSISTED WASTEWATER		KIA Loan Number	A18-003	
REVOLVING LOAN FUND		WRIS Number	SX21055006	
BORROWER	CITY OF MARION CRITTENDEN COUNTY			
BRIEF DESCRIPTION				
This is the second of the four funding cycles that KIA has established with the City of Marion to provide incremental funding through 2021 for the New Wastewater Treatment Plant project. The City obtained a KIA planning and design loan in the amount of \$587,200 in 2016 to complete the Facility Plan and subsequent design on the treatment plant.				
The requested \$4,801,590 in this funding cycle will allow the City to begin construction of a new 1.5 million gallon per day (MGD) Continuously Sequencing Reactor (SCR) wastewater treatment plant and collection system rehabilitation. The new treatment facility will be located approximately half a mile from the existing treatment plant and will also include a new administration building and maintenance garage. The collection work will consist of rehabilitation of approximately 43,336 linear feet of existing gravity sewer to reduce and eliminate inflow and infiltration.				
PROJECT FINANCING		PROJECT BUDGET		
Fund A Loan 2016	\$587,200	Administrative Expenses		\$50,000
Fund A Loan 2018	4,801,590	Legal Expenses		-
2020 CDBG Grant	1,000,000	Land, Easements		-
Fund A Loan 2020	4,455,000	Relocation Expense & Payments		-
Fund A Loan 2021	2,562,000	Planning		52,000
		Eng - Design / Const	6.3%	5.6%
		Eng - Insp	3.9%	2.9%
		Eng - Other		311,000
		Construction		10,892,900
		Contingency		1,089,290
TOTAL	\$13,405,790	TOTAL		\$13,405,790
REPAYMENT	Rate	0.50%	Est. Annual Payment \$22,277	
	Term	30 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	Eclipse Engineers, PLLC		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	Jun-18		
	Construction Start	Aug-18		
	Construction Stop	Apr-21		
DEBT PER CUSTOMER	Existing	\$1,626		
	Proposed	\$3,913		
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	1,428	\$27.52 (for 4,000 gallons)	
	Additional	0	\$27.52 (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	48,801	165,840	(117,039)	0.3
Audited 2016	86,385	171,712	(85,327)	0.5
Audited 2017	328,476	171,702	156,774	1.9
Projected 2018	309,131	171,250	137,881	1.8
Projected 2019	432,399	171,728	260,671	2.5
Projected 2020	412,272	171,133	241,139	2.4
Projected 2021	391,743	172,443	219,300	2.3
Projected 2022	357,331	328,560	28,771	1.1

Reviewer: Meili Sun
Date: June 12, 2018
Loan Number: A18-003

**KENTUCKY INFRASTRUCTURE AUTHORITY
WASTEWATER REVOLVING LOAN FUND (FUND A)
CITY OF MARION, CRITTENDEN COUNTY
PROJECT REVIEW
SX21055006**

I. PROJECT DESCRIPTION

The City of Marion is requesting \$4,801,590 in loan funding to construct a new 1.5 million gallon per day (MGD) Continuously Sequencing Reactor (SCR) wastewater treatment plant and collection system rehabilitation. The new treatment facility will be located approximately half a mile from the existing treatment plant and will also include a new administration building and maintenance garage. The existing 0.66 MGD treatment facility was constructed in the 1970s and can no longer handle wet weather flows during moderate to heavy rains. The City considered alternatives for reducing flow and optimizing treatment as part of the Facility Plan, under review by the KY Division of Water, and has selected this project as the best alternative. The collection work will consist of the rehabilitation of approximately 43,336 linear feet of existing gravity sewer to reduce and eliminate inflow and infiltration.

The City is currently under an Agreed Order with the KY Division of Water, mandating the completion of a Facility Plan and proper operation and maintenance of the wastewater treatment facilities and collection system. This project will partially satisfy requirements of this order.

KIA has established a multi-year funding strategy with the City to provide incremental funding through 2021. The City obtained a KIA planning and design loan in the amount of \$587,200 in 2016, to complete the Facility Plan and subsequent design on the treatment plant, and received priority funding for the construction loan. The loan outlay is as follow:

FY 2016	\$587,200	Planning & Design
FY 2018	\$4,801,590	Construction
FY 2020	\$4,455,000	Construction
FY 2021	\$2,562,000	Construction

II. PROJECT BUDGET

	<u>Total</u>
Administrative Expenses	\$ 50,000
Planning	52,000
Engineering Fees – Design & Const	669,000
Engineering Fees – Inspection	341,600
Engineering Fees – Other	311,000
Construction	10,892,900
Contingency	1,089,290
	<u>\$ 13,405,790</u>

III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
KIA Fund A Loan 2016	\$ 587,200	4%
KIA Fund A Loan 2018	4,801,590	36%
CDBG Grant 2020	1,000,000	8%
KIA Fund A Loan 2020	4,455,000	33%
KIA Fund A Loan 2021	2,562,000	19%
	<u>\$ 13,405,790</u>	<u>100%</u>

IV. KIA DEBT SERVICE

	<u>2018 Cumulative</u>	<u>Completion</u>
KIA Construction Loan	\$ 4,801,590	\$ 11,818,590
KIA P&D Loan A16-074	587,200	587,200
Principal Forgiveness	1,300,000	1,300,000
Amortized Loan Amount	<u>\$ 4,088,790</u>	<u>\$ 11,105,790</u>
Interest Rate	0.50%	0.50%
Loan Term (Years)	30	30
Estimated Annual Debt Service	\$ 146,940	\$ 399,113
Administrative Fee (0.20%)	8,178	22,212
Total Estimated Annual Debt Service	<u>\$ 155,118</u>	<u>\$ 421,325</u>

V. PROJECT SCHEDULE

Bid Opening	June, 2018
Construction Start	August, 2018
Construction Stop	April, 2021

VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

A) Customers

Customers	
Residential	1,254
Commercial	171
Industrial	3
Total	<u>1,428</u>

B) Rates

	Sewer	
	Current	Prior
Date of Rate Increase	08/27/15	06/01/13
Minimum (to 1,500 Gallons)	\$14.32	\$13.64
Next 3,500 Gallons	5.28	5.03
Next 10,000 Gallons	4.22	4.02
Cost for 4,000 gallons	\$27.52	\$26.22
Increase %	5.0%	
Affordability Index (Rate/MHI)	1.1%	

	Water		
	Proposed	Current	Prior
Date of Rate Increase	07/1/18	07/01/16	06/01/13
Minimum (to 1,500 Gallons)	\$19.13	\$19.13	\$18.22
Next 3,500 Gallons	7.04	7.04	6.70
Next 10,000 Gallons	5.63	5.63	5.36
Environmental Assessment Fee	20.40	12.00	
Cost for 4,000 gallons	\$57.13	\$48.73	\$34.97
Increase %	17.2%	39.3%	
Affordability Index (Rate/MHI)	2.3%	2.0%	

Date of Rate Increase	Environmental Assessment Fee	
	Proposed 07/01/18	Current 07/01/16
Up to 1,500 gallons	\$ 13.60	\$ 8.00
1,501 to 5,000 gallons	20.40	12.00
5,001 to 15,000 gallons	27.20	16.00
15,001 to 25,000 gallons	92.95	55.00
Over 25,000 gallons	187.00	110.00
Sewer customers not on City water	34.00	20.00
Increase %	70%	

The City passed an ordinance in June, 2016 applying a flat-rate environmental assessment fee to all water customers to raise funds for capital projects. A second ordinance was passed in June, 2018 to increase those rates.

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 3,175 with a Median Household Income (MHI) of \$29,853. The median household income for the Commonwealth is \$43,740. This project will qualify for a 0.50% interest rate because its MHI is below 80% of the state MHI.

Year	Population		County		County Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	3,392		9,207		June 2005	6.3%
1990	3,320	-2.1%	9,196	-0.1%	June 2010	10.0%
2000	3,196	-3.7%	9,384	2.0%	June 2015	5.6%
2010	3,039	-4.9%	9,315	-0.7%	June 2017	5.9%
Current	2,997	-1.4%	9,211	-1.1%		
Cumulative %		-11.6%		0.0%		

VIII. 2017 CAPITALIZATION GRANT EQUIVALENCIES

- 1) Green Project Reserve - This project does not qualify for Green Project Reserve (GPR) funding.
- 2) Additional Subsidization – This project qualifies for an additional subsidization in the amount of \$1.3 million.

IX. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements combining both water and sewer operations for the years ended June 30, 2015 through June 30, 2017. 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 18.5% from \$1.05 million in 2015 to \$1.25 million in 2017 due to a previously approved environment assessment fee collected from all water customers. Operating expenses decreased 6.5% from \$1.03 million in 2015 to \$0.97 million in 2017 as a result of lower maintenance and utility costs. The debt coverage ratio was 0.3, 0.5, and 1.9 for 2015, 2016, and 2017 respectively.

The balance sheet reflects a current ratio of 1.5, debt to equity ratio of 0.4, 41.0 days sales in accounts receivable, and 1.7 months of operating expenses in unrestricted cash.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues will increase with additional environmental assessment fees approved for fiscal year 2019.
- 2) Expenses will increase 2% annually for general inflation.
- 3) Debt service coverage is 1.1 in 2022 when full year principal and interest repayments begin. The ratio is calculated based on the cumulative funding of \$587,200 for the Planning and Design loan and \$4,801,590 for this loan request.
- 4) Should the borrower continue to request funding from KIA in 2020 and 2021, an estimated \$370,000 additional revenues will be needed by 2022 to support a loan up to \$11,105,790 at completion of the project.

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% (\$270,000 total) of the final amount borrowed to be funded annually (\$13,500 yearly) each December 1 for 20 years and maintained for the life of the loan.

X. DEBT OBLIGATIONS

	Outstanding	Maturity
1988 Water and Sewer Bond	\$ 255,000	2028
1993 Water and Sewer Bond	388,000	2033
KIA Loan A04-001	1,013,794	2025
KIA Loan B10-005	372,173	2034
KIA Loan A16-074 i/a/o \$587,200	293,445	TBD
Total	\$2,322,412	

XI. CONTACTS

Legal Applicant	
Name	City of Marion
Address	217 South Main St Marion, KY 42064
County	Crittenden
Authorized Official	Jared Byford, Mayor
Phone	(270) 965-2266
Email	mayor@marionky.gov

Project Contact - Applicant	
Name	Brian Thomas, Utilities Director
Representing	City of Marion
Address	217 South Main St. Marion, KY 42064
Phone	(270) 965-4731
Email	bthomas@marionky.gov

Project Administrator	
Name	Amy Frogue, Associate Director
Organization	Pennyriple Area Development District
Address	300 Hammond Dr. Hopkinsville, KY 42240
Phone	(270) 886-9484
Email	Amy.frogue@ky.gov

Consulting Engineer

Name	Alan Robinson
Firm	Eclipse Engineers, PLLC
Address	113 West Mount Vernon St. Somerset, KY 42501
Phone	(859) 433-9585
Email	arobinson@eclipseengineers.net

XII. RECOMMENDATIONS

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

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

	Audited 2015	Audited 2016	Audited 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022
Balance Sheet								
Assets								
Current Assets	356,501	326,601	401,519	429,094	497,328	545,556	589,416	595,170
Other Assets	7,805,387	7,511,281	7,629,519	7,766,428	10,108,609	12,435,164	12,343,453	11,964,599
Total	8,161,888	7,837,882	8,031,038	8,195,522	10,605,937	12,980,720	12,932,869	12,559,769
Liabilities & Equity								
Current Liabilities	245,371	251,368	261,028	264,527	267,011	271,504	274,007	279,521
Long Term Liabilities	2,155,163	2,028,968	2,194,252	2,356,872	3,974,548	5,588,231	5,449,116	5,304,987
Total Liabilities	2,400,534	2,280,336	2,455,280	2,621,399	4,241,559	5,859,735	5,723,123	5,584,508
Net Assets	5,761,354	5,557,546	5,575,758	5,574,123	6,364,378	7,120,985	7,209,746	6,975,261
Cash Flow								
Revenues	1,053,793	1,060,225	1,248,329	1,248,329	1,391,329	1,391,329	1,391,329	1,391,329
Operating Expenses	1,034,588	1,015,881	967,260	986,605	1,006,337	1,026,464	1,046,993	1,081,405
Other Income	29,596	42,041	47,407	47,407	47,407	47,407	47,407	47,407
Cash Flow Before Debt Service	48,801	86,385	328,476	309,131	432,399	412,272	391,743	357,331
Debt Service								
Existing Debt Service	165,840	171,712	171,702	171,250	171,728	171,133	172,443	173,442
Proposed KIA Loan	0	0	0	0	0	0	0	155,118
Total Debt Service	165,840	171,712	171,702	171,250	171,728	171,133	172,443	328,560
Cash Flow After Debt Service	(117,039)	(85,327)	156,774	137,881	260,671	241,139	219,300	28,771
Ratios								
Current Ratio	1.5	1.3	1.5	1.6	1.9	2.0	2.2	2.1
Debt to Equity	0.4	0.4	0.4	0.5	0.7	0.8	0.8	0.8
Days Sales in Accounts Receivable	46.6	49.1	41.0	41.0	41.0	41.0	41.0	41.0
Months Operating Expenses in Unrestricted Cash	0.6	0.3	1.7	2.0	2.6	3.1	3.5	3.5
Debt Coverage Ratio	0.3	0.5	1.9	1.8	2.5	2.4	2.3	1.1

EXECUTIVE SUMMARY		Reviewer	Melissa Rife	
KENTUCKY INFRASTRUCTURE AUTHORITY		Date	June 12, 2018	
FUND A, FEDERALLY ASSISTED WASTEWATER		KIA Loan Number	A18-007	
REVOLVING LOAN FUND		WRIS Number	SX21059054	
BORROWER		REGIONAL WATER RESOURCE AGENCY DAVIESS COUNTY		
BRIEF DESCRIPTION The project will extend RWRA's service to 122 households and a church in the Cedar Hills neighborhood. The package treatment plant currently serving these customers is failing and will be eliminated. The sewer extension will require gravity sewers, a pump station, and a force main. The existing collection system within the Cedar Hills neighborhood will also be rehabilitated.				
PROJECT FINANCING		PROJECT BUDGET		
Fund A Loan	\$2,047,000	RD Fee %	Actual %	
		Administrative Expenses		\$35,000
		Legal Expenses		20,000
		Land, Easements		65,000
		Eng - Design / Const	7.1%	6.3%
		Eng - Insp	4.1%	2.4%
		Construction		1,591,000
		Contingency		183,000
TOTAL	\$2,047,000	TOTAL		\$2,047,000
REPAYMENT	Rate	1.75%	Est. Annual Payment	\$125,841
	Term	20 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	Regional Water Resource Agency		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	June 2018		
	Construction Start	July 2018		
	Construction Stop	November 2019		
DEBT PER CUSTOMER	Existing	\$934		
	Proposed	\$1,476		
OTHER DEBT	See Attached			
RESIDENTIAL RATES	Current	<u>Users</u>	<u>Avg. Bill</u>	
		30,599	\$34.46	(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 2014	4,517,894	2,787,456	1,730,438	1.6
Audited 2015	5,372,723	2,957,026	2,415,697	1.8
Audited 2016	7,776,746	3,177,474	4,599,272	2.4
Audited 2017	8,492,271	2,768,067	5,724,204	3.1
Projected 2018	8,821,079	3,064,332	5,756,747	2.9
Projected 2019	9,041,557	3,195,033	5,846,525	2.8
Projected 2020	9,239,430	3,769,885	5,469,546	2.5
Projected 2021	9,416,097	4,528,902	4,887,195	2.1
Projected 2022	9,572,752	4,517,907	5,054,845	2.1

Reviewer: Melissa Rife
Date: June 12, 2018
Loan Number: A18-007

**KENTUCKY INFRASTRUCTURE AUTHORITY
WASTEWATER REVOLVING LOAN FUND (FUND A)
REGIONAL WATER RESOURCE AGENCY, DAVIESS COUNTY
PROJECT REVIEW
SX21059054**

I. PROJECT DESCRIPTION

The Regional Water Resource Agency (RWRA) is requesting Fund A loan in the amount of \$2,047,000 for the Cedar Hills Subdivision Sewer Extension project.

This project involves the extension of sewer service to the Cedar Hills neighborhood in eastern Daviess County via gravity sewers extending from the existing Countryside Pump Station. The sewer extension will require a combination of gravity sewers varying in size up to 15', a pump station, and a force main. This project will eliminate one failing package plant that presently serves 122 households and one church. As proposed, these 122 homes and church will be connected into the Regional Water Resource Agency sewer system.

In addition, this project also involves the rehabilitation of the existing collection system within the Cedar Hills neighborhood. The level of decline of the package plant and collection system has accelerated in recent years, necessitating the development of an alternative to the existing package plant and substantial rehabilitation efforts (manhole rehabilitation, manholes adjusted to grade, main repairs, lateral repairs and pipe lining.)

II. PROJECT BUDGET

	<u>Total</u>
Administrative Expenses	\$ 35,000
Legal Expenses	20,000
Land, Easements	65,000
Engineering Fees – Design	95,000
Engineering Fees – Construction	16,000
Engineering Fees – Inspection	42,000
Construction	1,591,000
Contingency	183,000
Total	\$ 2,047,000

III. PROJECT FUNDING

	Amount	%
Fund A Loan	\$ 2,047,000	100%
Total	\$ 5,619,274	100%

IV. KIA DEBT SERVICE

Construction Loan	\$ 2,047,000
Less: Principal Forgiveness	0
Amortized Loan Amount	\$ 2,047,000
Interest Rate	1.75%
Loan Term (Years)	20
Estimated Annual Debt Service	\$ 121,747
Administrative Fee (0.20%)	4,094
Total Estimated Annual Debt Service	\$ 125,841

V. PROJECT SCHEDULE

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

VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

A) Customers

Customers	Current	Additional	Total
Residential	27,718	122	27,840
Commercial	2,881	1	2,882
Total	30,599	123	30,722

B) Rates

	Current	Prior	Prior
Date of Last Rate Increase	07/01/17	07/01/16	01/01/16
Minimum	\$ 14.05	\$ 12.95	\$ 11.95
Each additional 1,000 gallons	4.39	4.39	4.39
Environmental Improvement Charge	5.15	3.95	2.95
Capacity Fee	0.53		
Cost for 4,000 gallons	\$ 37.29	\$ 34.46	\$ 32.46
Increase %	8.2%	6.2%	
Affordability Index (Rate/MHI)	1.1%	1.1%	

RWRA has rate adjustments planned through 2021. All rate increases have been included in this analysis.

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 72,417 with a Median Household Income (MHI) of \$41,810. The median household income for the Commonwealth is \$43,740. The project will qualify for a 1.75% interest rate.

Year	Population				Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	54,450		85,949		June 2005	6.3%
1990	53,549	-1.7%	87,189	1.4%	June 2010	9.2%
2000	54,067	1.0%	91,545	5.0%	June 2015	4.9%
2010	57,265	5.9%	96,656	5.6%	June 2017	5.3%
Current	58,685	2.5%	98,724	2.1%		
Cumulative %		7.8%		14.9%		

VIII. 2017 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 06/30/14 through 06/30/17. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2016 operating expenses (\$576,572) and fiscal 2017 operating expenses (\$705,575). Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented

HISTORY

Revenues increased approximately 33% from \$16.1 million to \$21.4 million from 2014 to 2017 while operating expenses increased 11.5% from \$12.0 million to \$13.3 million. Cash flow available for debt service was \$4.5 million, \$5.3 million, \$7.8 million, and \$8.5 million in 2014, 2015, 2016, and 2017 respectively, while the debt coverage ratio was 1.6, 1.8, 2.4, and 3.1.

The 2017 balance sheet reflects a current ratio of 3.2, debt to equity ratio of 0.8, and 33.3 days sales in accounts receivable.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues will increase according to the rate plan established by RWRA through 2021.
- 2) Operating expenses will increase 2% annually for inflation.
- 3) Debt service coverage is 2.1 in 2021 when principal and interest repayments begin.

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

REPLACEMENT RESERVE

The current replacement reserve account of \$2,500,000 is adequate to cover reserves for all KIA loans. No additional reserves will be required as a result of this loan.

X. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
2016 Series A Revenue Bonds	\$ 2,350,000	2027
KIA A99-04	8,538,288	2023
KIA A06-02	3,968,930	2027
KIA A07-08	854,203	2028
KIA A10-13	5,347,123	2032
KIA A12-14	332,895	2033
KIA A12-15	2,283,955	2033
KIA A13-017	813,208	2035
KIA A13-028	809,775	2035
KIA A14-008	331,439	2035
City of Owensboro (JSA Improvements)	715,947	2035
KIA A15-002 (i/a/o \$8,007,500)	0	TBD
KIA A15-027 (i/a/o \$1,425,000)	219,174	TBD
KIA A15-099 (i/a/o \$3,566,001)	1,960,589	TBD
KIA A16-026 P&D (i/a/o \$415,000)	75,499	TBD
KIA A16-082 PTP Loan (i/a/o \$200,000)	0	TBD
KIA B17-014 (i/a/o \$500,000)	0	TBD
KIA B17-015 (i/a/o \$485,000)	0	TBD
KIA A18-005 (i/a/o \$4,180,262)	0	TBD
KIA A18-007 (i/a/o \$2,047,000)	0	TBD
KIA A18-026 (i/a/o \$5,619,274)	0	TBD
Total	\$ 28,531,967	

XI. CONTACTS

Legal Applicant	
Entity Name	Regional Water Resource Agency
Authorized Official	Joseph G. Schepers, Executive Director
County	Daviess
Email	schepersjg@rwra.org
Phone	(270) 687-8440
Address	1722 Pleasant Valley Road Owensboro, KY 42303

Applicant Contact

Name	Sean O'Bryan, Assoc. Dir. of Engineering
Organization	Regional Water Resource Agency
Email	obryansm@rwra.org
Phone	(270) 927-9211
Address	2101 Grimes Avenue Owensboro, KY 42303

Project Administrator

Name	Brad Alley
Organization	GRADD
Email	bradalley@gradd.com
Phone	(270) 926-4433
Address	300 GRADD Way Owensboro, KY 42301

Consulting Engineer

PE Name	Mark A. Sneve
Firm Name	Strand Associates, Inc.
Email	mark.sneve@strand.com
Phone	(502) 583-7020
Address	325 W. Main Street, Suite 710 Louisville, KY 40202

XII. RECOMMENDATIONS

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

**REGIONAL WATER RESOURCE AGENCY
FINANCIAL SUMMARY (June YEAR END)**

	Audited 2014	Audited 2015	Audited 2016	Audited 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022
Balance Sheet									
Assets									
Current Assets	6,600,476	8,684,574	10,735,081	15,074,573	15,708,114	16,337,666	16,927,921	17,458,540	18,004,625
Other Assets	72,739,995	73,766,013	75,927,345	78,631,149	82,479,963	95,574,801	102,902,863	102,351,245	101,950,513
Total	79,340,471	82,450,587	86,662,426	93,705,722	98,188,077	111,912,467	119,830,784	119,809,786	119,955,138
Liabilities & Equity									
Current Liabilities	3,613,418	4,069,830	4,120,209	4,649,222	4,719,336	4,781,473	4,844,510	4,903,449	4,935,949
Long Term Liabilities	28,153,489	33,887,218	34,208,359	35,516,645	36,658,967	46,411,342	50,861,705	48,079,364	45,297,023
Total Liabilities	31,766,907	37,957,048	38,328,568	40,165,867	41,378,303	51,192,815	55,706,215	52,982,813	50,232,972
Net Assets	47,573,564	44,493,539	48,333,858	53,539,855	56,809,774	60,719,652	64,124,569	66,826,973	69,722,166
Cash Flow									
Revenues	16,121,783	17,687,562	19,642,314	21,407,439	22,042,267	22,534,712	23,009,992	23,469,614	23,914,883
Operating Expenses	11,960,694	12,711,388	12,613,885	13,331,742	13,598,377	13,870,344	14,147,751	14,430,706	14,719,320
Other Income	356,805	396,549	748,317	416,574	377,189	377,189	377,189	377,189	377,189
Cash Flow Before Debt Service	4,517,894	5,372,723	7,776,746	8,492,271	8,821,079	9,041,557	9,239,430	9,416,097	9,572,752
Debt Service									
Existing Debt Service	2,787,456	2,957,026	3,177,474	2,768,067	3,064,332	3,195,033	3,706,964	4,403,061	4,392,066
Proposed KIA Loan	0	0	0	0	0	0	62,921	125,841	125,841
Total Debt Service	2,787,456	2,957,026	3,177,474	2,768,067	3,064,332	3,195,033	3,769,885	4,528,902	4,517,907
Cash Flow After Debt Service	1,730,438	2,415,697	4,599,272	5,724,204	5,756,747	5,846,525	5,469,546	4,887,195	5,054,845
Ratios									
Current Ratio	1.8	2.1	2.6	3.2	3.3	3.4	3.5	3.6	3.6
Debt to Equity	0.7	0.9	0.8	0.8	0.7	0.8	0.9	0.8	0.7
Days Sales in Accounts Receivable	32.7	32.0	33.1	33.3	33.3	33.3	33.3	33.3	33.3
Months Operating Expenses in Unrestricted Cash	3.5	4.9	6.4	9.7	10.0	10.3	10.6	10.8	11.0
Debt Coverage Ratio	1.6	1.8	2.4	3.1	2.9	2.8	2.5	2.1	2.1

EXECUTIVE SUMMARY		Reviewer	Meili Sun	
KENTUCKY INFRASTRUCTURE AUTHORITY		Date	April 9, 2018	
FUND A, FEDERALLY ASSISTED WASTEWATER		KIA Loan Number	A18-010	
REVOLVING LOAN FUND		WRIS Number	SX21185038	
BORROWER	OLDHAM COUNTY ENVIRONMENTAL AUTHORITY OLDHAM COUNTY			
BRIEF DESCRIPTION				
This project will address inflow and infiltration (I/I) issues during wet weather events. It is part of the Corrective Action Plan in response to an Agreed Order with the KY Division of Water, to prevent sanitary sewer overflows in the Ash Avenue and Country Village areas of Oldham County. The project consists of correcting identified defects and cross connections in approximately 33,000 linear feet of collection system. The defects will be identified by closed circuit TV and smoke testing. The rehabilitation work will consist primarily of slip lining, manhole lining, and replacement where necessary. The total estimated I/I reduction is 498,393 gallons per day.				
PROJECT FINANCING		PROJECT BUDGET		
Fund A Loan	\$2,000,000	RD Fee %	Actual %	
				Administrative Expenses \$15,000
		Eng - Design / Const 7.8%	6.5%	120,000
		Eng - Insp 4.8%	1.1%	20,000
		Construction		1,752,750
		Contingency		92,250
TOTAL	\$2,000,000	TOTAL		\$2,000,000
REPAYMENT	Rate	1.75%	Est. Annual Payment \$122,951	
	Term	20 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	Hagerty Consulting, LLC		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	Jun-18		
	Construction Start	Jul-18		
	Construction Stop	Jun-19		
DEBT PER CUSTOMER	Existing	\$5,204		
	Proposed	\$6,149		
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	5,674	\$76.27 (for 4,000 gallons)	
	Additional	0	\$76.27 (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	1,806,016	1,437,011	369,005	1.3
Audited 2016	2,714,432	2,014,710	699,722	1.3
Audited 2017	1,715,460	2,133,769	(418,309)	0.8
Projected 2018	2,721,055	2,321,609	399,446	1.2
Projected 2019	3,177,618	2,325,331	852,287	1.4
Projected 2020	3,160,751	2,577,414	583,338	1.2
Projected 2021	3,143,029	2,823,201	319,828	1.1
Projected 2022	3,134,828	2,827,269	307,559	1.1

Reviewer: Meili Sun
Date: April 9, 2018
Loan Number: A18-010

**KENTUCKY INFRASTRUCTURE AUTHORITY
WASTEWATER REVOLVING LOAN FUND (FUND A)
OLDHAM COUNTY ENVIRONMENTAL AUTHORITY, OLDHAM COUNTY
PROJECT REVIEW
SX21185038**

I. PROJECT DESCRIPTION

This project will address inflow and infiltration (I/I) issues during wet weather events. It is part of the Corrective Action Plan in response to an Agreed Order with the KY Division of Water, to prevent sanitary sewer overflows in the Ash Avenue and County Village areas of Oldham County. The project consists of correcting identified defects and cross connections in approximately 33,000 linear feet of collection system. The defects will be identified by closed circuit TV and smoke testing. The rehabilitation work will consist primarily of slip lining, manhole lining, and replacement where necessary. The total estimated I/I reduction is 498,393 gallons per day.

II. PROJECT BUDGET

	<u>Total</u>
Administrative Expenses	\$ 15,000
Engineering Fees - Design / Const	120,000
Engineering Fees - Inspection	20,000
Construction	1,752,750
Contingency	92,250
Total	\$ 2,000,000

III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund A Loan	\$ 2,000,000	100%
Total	\$ 2,000,000	100%

IV. KIA DEBT SERVICE

Construction Loan	\$ 2,000,000
Interest Rate	1.75%
Loan Term (Years)	20
Estimated Annual Debt Service	\$ 118,951
Administrative Fee (0.20%)	4,000
Total Estimated Annual Debt Service	\$ 122,951

V. PROJECT SCHEDULE

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

VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

A) Customers

Customers	Current
Residential	5,490
Commercial	184
Total	5,674

B) Rates

	Current	Prior	Prior
Date of Last Rate Increase	08/15/17	07/15/16	08/01/15
Cap Ex Expense	\$46.83	\$42.49	\$38.88
Usage per 1,000 Gallons	7.36	7.18	6.84
Cost for 4,000 gallons	\$76.27	\$71.21	\$66.24
Increase %	7.1%	7.5%	
Affordability Index (Rate/MHI)	1.0%		

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the County’s population was 63,876 with a Median Household Income (MHI) of \$83,291. The median household income for the Commonwealth is \$43,740. The project will qualify for a 1.75% interest rate because it is part of the Corrective Action Plan in response to an Agreed Order with the Kentucky Department of Water.

Year	Population		County Unemployment	
	County	% Change	Date	Rate
1980	27,795		June 2005	5.2%
1990	33,263	19.7%	June 2010	7.4%
2000	46,178	38.8%	June 2015	4.3%
2010	60,316	30.6%	June 2017	4.3%
Current	63,876	5.9%		
Cumulative %		129.8%		

VIII. 2017 CAPITALIZATION GRANT EQUIVALENCIES

- 1) Green Project Reserve - This project will be reported for Green Project Reserve (GPR) funding in the amount of \$2,000,000.
- 2) Additional Subsidization – This project does not qualify for additional subsidization.

IX. FINANCIAL ANALYSIS

Financial information was obtained from the Authority's audited financial statements for the years ended June 30, 2015 through 2017 which includes wastewater and storm water operations. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

HISTORY

Overall revenues increased 16% from \$5.6 million in 2015 to \$6.5 million in 2017. Sewer revenues increased 34% from \$4.7 million to \$6.3 million during the same period due to previously approved rate increases and population growth. Operating expenses increased 6% from \$4.0 million in 2015 to \$4.2 million in 2017 due to increased chemicals and electricity costs. The debt coverage ratio was 1.3, 1.4, and 0.8, respectively, for the years 2015 through 2017.

The balance sheet reflects a current ratio of 1.8, debt to equity ratio of 2.6, 61.8 days sales in accounts receivable, and 9.0 months of operating expenses in unrestricted cash.

The Oldham County Environmental Authority has proposed a 6% sewer rate increase to take effect in July, 2018. The Authority is currently in the process of including the increase in their budget and expect approval and issuance of a resolution by May.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues reflect all previously approved rate increases and will increase around 1% annually for growth.
- 2) Revenues reflect a proposed 6% rate increase effective July 1, 2018.
- 3) Storm water revenues had ceased in fiscal year 2017. An independent board and district became effective on August 27, 2016 and had taken over all storm water operations.
- 4) Expenses will increase 2% annually for inflation.
- 5) Debt service coverage is 1.1 in 2021 when full year principal and interest repayments begin.

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

REPLACEMENT RESERVE

The annual replacement cost is \$5,000. This amount should be added to the replacement account until the balance reaches \$100,000 and maintained for the life of the loan.

X. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
2001 Lease (US Bank)	\$ 2,595,000	2031
Series 2009 Bonds	5,480,000	2030
KIA loan (A10-05)	844,608	2033
KIA loan (A10-06)	98,151	2032
KIA loan (A10-04)	2,361,273	2033
KIA loan (A10-07)	2,163,854	2033
KIA loan (A11-015)	556,932	2033
KIA loan (A12-29)	6,363,579	2036
Series 2014 Bonds	9,055,000	2035
Total	\$ 29,518,379	

XI. CONTACTS

Legal Applicant	
Entity Name	Oldham County Environmental Authority
Authorized Official	Horace Harrod, Chairman
County	Oldham
Email	horace.harrod@farmcreditbank.com
Phone	(502) 225-4582
Address	700 West Jefferson Street Lagrange, KY 40031

Project Contact - Applicant	
Name	Ed Basquill
Organization	Oldham County Environmental Authority
Email	ed.basquill@veoliawaterna.com
Phone	(502) 225-9477
Address	700 West Jefferson Street LaGrange, KY 40031

Project Administrator

Name	Holly L Nicholas
Organization	Kentucky Engineering Group, PLLC
Email	hnicholas@kyengr.com
Phone	859-333-9742
Address	P.O. Box 1034 Versailles, KY 40383

Consulting Engineer

PE Name	James L. Hagerty
Firm Name	Hagerty Consulting, LLC
Email	jhagerty@hagertyco.us
Phone	502-627-8904
Address	7000 Penfield Place Prospect, KY 40059

RECOMMENDATIONS

KIA staff recommends approval of the loan with the standard conditions and the following special condition:

- 1.) Sewer revenues be increased at 6% or \$407,072 by July 1, 2018.

**OLDHAM COUNTY ENVIRONMENTAL AUTHORITY
FINANCIAL SUMMARY (JUNE YEAR END)**

	Audited 2015	Audited 2016	Audited 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022
Balance Sheet								
Assets								
Current Assets	11,537,313	7,486,811	4,301,961	4,435,148	4,697,135	4,827,073	4,904,701	4,980,160
Other Assets	28,722,793	36,671,791	38,754,704	40,818,378	45,291,371	44,252,264	43,002,157	41,731,650
Total	40,260,106	44,158,602	43,056,665	45,253,526	49,988,506	49,079,337	47,906,858	46,711,810
Liabilities & Equity								
Current Liabilities	1,952,806	2,373,020	2,364,535	2,416,056	2,473,818	2,527,116	2,596,060	2,644,872
Long Term Liabilities	26,769,149	29,366,279	28,696,024	30,357,340	33,976,794	32,409,150	30,789,162	29,137,262
Total Liabilities	28,721,955	31,739,299	31,060,559	32,773,396	36,450,612	34,936,266	33,385,222	31,782,134
Net Assets	11,538,151	12,419,303	11,996,106	12,480,130	13,537,894	14,143,071	14,521,636	14,929,676
Cash Flow								
Revenues	5,559,262	6,668,878	6,466,972	6,784,525	7,326,439	7,407,030	7,488,507	7,570,881
Operating Expenses	3,957,164	4,490,277	4,183,864	4,267,541	4,352,892	4,450,350	4,549,549	4,640,124
Other Income	203,918	535,831	(567,648)	204,071	204,071	204,071	204,071	204,071
Cash Flow Before Debt Service	1,806,016	2,714,432	1,715,460	2,721,055	3,177,618	3,160,751	3,143,029	3,134,828
Debt Service								
Existing Debt Service	1,437,011	2,014,710	2,133,769	2,321,609	2,325,331	2,515,938	2,700,250	2,704,318
Proposed KIA Loan	0	0	0	0	0	61,476	122,951	122,951
Total Debt Service	1,437,011	2,014,710	2,133,769	2,321,609	2,325,331	2,577,414	2,823,201	2,827,269
Cash Flow After Debt Service	369,005	699,722	(418,309)	399,446	852,287	583,338	319,828	307,559
Ratios								
Current Ratio	5.9	3.2	1.8	1.8	1.9	1.9	1.9	1.9
Debt to Equity	2.5	2.6	2.6	2.6	2.7	2.5	2.3	2.1
Days Sales in Accounts Receivable	66.3	62.7	61.8	61.8	61.8	61.8	61.8	61.8
Months Operating Expenses in Unrestricted Cash	31.9	16.8	9.0	9.1	9.4	9.5	9.5	9.4
Debt Coverage Ratio	1.3	1.3	0.8	1.2	1.4	1.2	1.1	1.1

EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND A, FEDERALLY ASSISTED WASTEWATER REVOLVING LOAN FUND		Reviewer Date KIA Loan Number WRIS Number	Melissa Rife May 8, 2018 A18-022 SX21035006	
BORROWER	PADUCAH MCCRACKEN COUNTY JOINT SEWER AGENCY MCCRACKEN COUNTY			
BRIEF DESCRIPTION				
<p>The Paducah McCracken Joint Sewer Agency (JSA) is requesting \$625,000 in loan funding to eliminate the use of two existing package treatment plants in McCracken County. The package plants currently serve JoAnne Estates and Wilmington Chiles Subdivisions (a combination of 278 households) and are more than 25 years old and in need of repair. In 2016, the owner of the plants passed away, leaving the heirs of the estate to manage and operate the systems. Written request was made by the heirs to the JSA to accept flow from the collection system, which will eventually result in a Public Service Commission (PSC) petition for transfer of the collection systems. Ownership of the package treatment plants will remain with the heirs. In order for the JSA to accept flow from the package plants, approximately 1,000 linear feet (LF) of gravity sewer will be constructed to JoAnn Estates and 3,000 LF of force main along with a lift station will be extended to Wilmington Chiles subdivision. The new sewer lines will collect the wastewater flow from both subdivisions to be treated at the JSA wastewater treatment plant. Once constructed, the two package plants will be decommissioned and both neighborhoods will be served solely by the JSA.</p>				
PROJECT FINANCING		PROJECT BUDGET		
Fund A Loan	\$625,000	RD Fee %	Actual %	
		Legal Expenses	7,500	
		Land, Easements	37,500	
		Eng - Design / Const	10.4% 11.1% 53,000	
		Eng - Insp	7.5% 6.3% 30,000	
		Eng - Other	20,000	
		Construction	387,000	
		Contingency	90,000	
TOTAL	\$625,000	TOTAL	\$625,000	
REPAYMENT	Rate	1.75%	Est. Annual Payment \$23,053	
	Term	20 Years	1st Payment 6 Mo. after first draw	
PROFESSIONAL SERVICES	Engineer	Rivercrest Engineering Incorporated		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	Oct-18		
	Construction Start	Nov-18		
	Construction Stop	Jun-19		
DEBT PER CUSTOMER	Existing	\$1,159		
	Proposed	\$1,563		
OTHER DEBT	See Attached			
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached			
RESIDENTIAL RATES		Users	Avg. Bill	
	Current	18,675	\$23.32 (for 4,000 gallons)	
	Additional	278	\$23.32 (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	2,878,940	1,387,743	1,491,197	2.1
Audited 2016	3,446,707	1,543,220	1,903,487	2.2
Audited 2017	4,033,482	1,593,595	2,439,887	2.5
Projected 2018	4,745,774	1,580,890	3,164,884	3.0
Projected 2019	4,652,558	1,734,380	2,918,179	2.7
Projected 2020	4,557,478	2,021,408	2,536,070	2.3
Projected 2021	4,460,496	2,301,242	2,159,254	1.9
Projected 2022	4,361,574	2,301,908	2,059,666	1.9

Reviewer: Melissa Rife
Date: May 8, 2018
Loan Number: A18-022

**KENTUCKY INFRASTRUCTURE AUTHORITY
WASTEWATER REVOLVING LOAN FUND (FUND "A")
PADUCAH MCCRACKEN JOINT SEWER AGENCY, MCCRACKEN COUNTY
PROJECT REVIEW
SX21035006**

I. PROJECT DESCRIPTION

The Paducah McCracken Joint Sewer Agency (JSA) is requesting a Fund A loan in the amount of \$625,000 to eliminate the use of two existing package treatment plants in McCracken County. The package plants currently serve JoAnne Estates and Wilmington Chiles Subdivisions (a combination of 278 households) and are more than 25 years old and in need of repair.

In 2016, the owner of the plants passed away, leaving the heirs of the estate to manage and operate the systems. Written request was made by the heirs to the JSA to accept flow from the collection system, which will eventually result in a Public Service Commission (PSC) petition for transfer of the collection systems. Ownership of the package treatment plants will remain with the heirs. In order for the JSA to accept flow from the package plants, approximately 1,000 linear feet (LF) of gravity sewer will be constructed to JoAnn Estates and 3,000 LF of force main along with a lift station will be extended to Wilmington Chiles subdivision. The new sewer lines will collect the wastewater flow from both subdivisions to be treated at the JSA wastewater treatment plant. Once constructed, the two package plants will be decommissioned and both neighborhoods will be served solely by the JSA.

The Agency currently serves approximately 18,000 customers.

II. PROJECT BUDGET

	<u>Total</u>
Legal Expenses	\$ 7,500
Land, Easements	37,500
Engineering Fees – Design	42,000
Engineering Fees – Construction	11,000
Engineering Fees – Inspection	30,000
Engineering Fees – Other	20,000
Construction	387,000
Contingency	90,000
Total	\$ 625,000

III. PROJECT FUNDING

	Amount	%
Fund A Loan	\$ 625,000	100%
Total	\$ 625,000	100%

IV. KIA DEBT SERVICE

Construction Loan Amount	\$ 625,000
Principal Forgiveness	250,000
Amortized Loan Amount	\$ 375,000
Interest Rate	1.75%
Loan Term (Years)	20
Estimated Annual Debt Service	\$ 22,303
Administrative Fee (0.20%)	750
Total Estimated Annual Debt Service	\$ 23,053

V. PROJECT SCHEDULE

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

VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

A) Customers

Customers	Current
Residential	18,675
Total	18,675

B) Rates

	Current	Prior
Date of Last Rate Increase	07/01/17	03/01/16
Minimum (3,000 gallons) per 1,000	\$17.49 5.83	\$15.45 5.15
Cost for 4,000 gallons	\$23.32	\$20.60
Increase %	13.2%	
Affordability Index (Rate/MHI)	0.7%	0.6%

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 \$43,740. The project will qualify for a 1.75% interest rate.

Year	Population				County Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	29,315		61,310		June 2005	6.3%
1990	27,256	-7.0%	62,879	2.6%	June 2010	9.0%
2000	26,307	-3.5%	65,514	4.2%	June 2015	5.8%
2010	25,024	-4.9%	65,565	0.1%	June 2017	6.8%
Current	25,010	-0.1%	65,292	-0.4%		
Cumulative %		-14.7%		6.5%		

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 qualifies for additional subsidization in the amount of \$250,000.

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; \$92,544, (\$109,351), (\$178,994) respectively.

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

HISTORY

Revenues increased 14.8% from \$6.9 million in 2015 to \$7.9 million in 2017 due to previously approved rate increases. Operating expenses increased 5.2% from \$4.3 million in 2015 to \$4.6 million in 2017. The debt coverage ratio was 2.1, 2.2, and 2.5 from 2015 to 2017, respectively.

The 2017 balance sheet reflects a current ratio of 5.4, a debt to equity ratio of 0.5, and a collection period of 19.4 days. Unrestricted cash equals 17.2 months of operating expenses.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues will increase 13.2% in 2018 due to a previously approved rate increase. The utility has a CPI clause that states they may adjust rates based on CPI-U each April although no CPI assumptions for revenue growth were factored into this analysis.
- 2) Expenses will increase 2% for inflation
- 3) Debt service coverage is 2.3 in 2020 when principal and interest repayments for this loan begin. The debt service coverage is 1.9 in 2021 when principal and interest repayments begin for all outstanding loans.

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

REPLACEMENT RESERVE

The Agency currently has designated reserves of \$3,000,000. The reserves are specifically for high dollar capital equipment purchases, for emergencies, or for rate stabilization in the event of a loss of a substantial revenue stream. No additional reserves will be required.

X. DEBT OBLIGATIONS

	Outstanding	Maturity
Revenue Bonds 2012	\$ 4,075,500	2051
Revenue Refunding Bonds 2014	3,770,000	2031
KIA (A03-01)	479,865	2023
KIA (A03-08)	583,670	2026
KIA (A04-03)	385,236	2025
KIA (A08-01)	998,164	2029
KIA (A09-02)	5,073,795	2033
KIA (A12-08)	6,268,875	2035
KIA (A16-072) (i/a/o \$2,385,000)		
KIA (A17-033) (i/a/o \$9,100,000)		
Total	\$ 21,635,106	

XI. CONTACTS

Legal Applicant

Name	Paducah McCracken Joint Sewer Agency
Address	621 Northview Street Paducah, KY 42001
County	McCracken
Authorized Official	John Hodges, Executive Director
Phone	270-575-0056
Email	jhodges@jointsewer.com

Project Contact - Applicant

Name	Josh Webb, Director of Operations & Engineering
Representing	Paducah McCracken Joint Sewer Agency
Address	621 Northview St Paducah, KY 42001
Phone	270-575-0056
Email	jwebb@jointsewer.com

Project Administrator

Name	Paducah McCracken Joint Sewer Agency
Address	621 Northview St Paducah, KY 42001
Contact	Amy Darnell, Director of Finance
Phone	270-575-0056
Email	adarnell@jointsewer.com

Consulting Engineer

Name	Charles Delcommune McCann
Firm	Rivercrest Engineering Incorporated
Address	7020 US Highway 68 West Paducah, KY 42003
Phone	270-519-7675
Email	cmccann@rivercresteng.com

XII. RECOMMENDATIONS

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

**PADUCAH MCCRACKEN COUNTY JOINT SEWER AGENCY
FINANCIAL SUMMARY (JUNE YEAR END)**

	Audited 2015	Audited 2016	Audited 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022
Balance Sheet								
Assets								
Current Assets	13,346,416	13,992,586	13,850,539	14,434,388	15,018,024	15,525,238	15,957,088	16,369,022
Other Assets	68,350,592	67,910,623	68,357,999	69,377,418	76,631,577	77,414,793	76,290,674	75,086,885
Total	81,697,008	81,903,209	82,208,538	83,811,806	91,649,600	92,940,031	92,247,763	91,455,907
Liabilities & Equity								
Current Liabilities	2,137,269	2,581,348	2,561,594	1,826,342	1,851,550	1,881,712	1,912,835	1,907,207
Long Term Liabilities	24,504,396	23,890,401	23,609,127	25,152,337	31,503,686	31,934,142	30,736,693	29,554,072
Total Liabilities	26,641,665	26,471,749	26,170,721	26,978,679	33,355,236	33,815,854	32,649,528	31,461,279
Net Assets	55,055,343	55,431,460	56,037,817	56,833,127	58,294,365	59,124,177	59,598,235	59,994,628
Cash Flow								
Revenues	6,921,452	7,407,866	7,948,802	8,998,353	8,998,353	8,998,353	8,998,353	8,998,353
Operating Expenses	4,343,982	4,337,519	4,569,420	4,660,808	4,754,024	4,849,104	4,946,086	5,045,008
Other Income	301,470	376,360	654,100	408,229	408,229	408,229	408,229	408,229
Cash Flow Before Debt Service	2,878,940	3,446,707	4,033,482	4,745,774	4,652,558	4,557,478	4,460,496	4,361,574
Debt Service								
Existing Debt Service	1,387,743	1,543,220	1,593,595	1,580,890	1,722,853	1,998,355	2,278,189	2,278,855
Proposed KIA Loan	0	0	0	0	11,527	23,053	23,053	23,053
Total Debt Service	1,387,743	1,543,220	1,593,595	1,580,890	1,734,380	2,021,408	2,301,242	2,301,908
Cash Flow After Debt Service	1,491,197	1,903,487	2,439,887	3,164,884	2,918,179	2,536,070	2,159,254	2,059,666
Ratios								
Current Ratio	6.2	5.4	5.4	7.9	8.1	8.3	8.3	8.6
Debt to Equity	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5
Days Sales in Accounts Receivable	26.5	24.4	19.4	19.4	19.4	19.4	19.4	19.4
Months Operating Expenses in Unrestricted Cash	16.7	15.8	17.2	18.5	19.6	20.5	21.1	21.7
Debt Coverage Ratio	2.1	2.2	2.5	3.0	2.7	2.3	1.9	1.9

EXECUTIVE SUMMARY		Reviewer	Jeff Abshire	
KENTUCKY INFRASTRUCTURE AUTHORITY		Date	June 12, 2018	
FUND B, INFRASTRUCTURE		KIA Loan Number	B18-009, C18-008	
REVOLVING LOAN FUND				
BORROWER	HOPKINSVILLE ELECTRIC SYSTEM CHRISTIAN COUNTY			
BRIEF DESCRIPTION				
This project will install sixty-five miles of fiber to provide high speed internet with gigabit speed capability to 3,600 homes within the Hopkinsville city limits. Voice services will also be provided.				
PROJECT FINANCING		PROJECT BUDGET		
Fund B Loan	\$2,500,000	RD Fee %	Actual %	
Fund C Loan	1,800,000	Legal Expenses		20,000
		Planning		20,000
		Eng - Technical Services		120,000
		Construction		1,930,407
		Equipment		1,846,749
		Contingency		362,844
TOTAL	\$4,300,000	TOTAL		\$4,300,000
REPAYMENT	Rate	1.75%	Est. Annual Payment	\$153,689
	Term	20 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	n/a		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	Jun-18		
	Construction Start	Aug-18		
	Construction Stop	Jan-19		
DEBT PER CUSTOMER	Existing	\$2,258		
	Proposed	\$2,141		
OTHER DEBT	See Attached			
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	3,535	\$60.00	
	Additional	900	\$60.00	
REGIONAL COORDINATION	n/a			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2014	1,583,453	598,996	984,457	2.6
Audited 2015	1,446,716	598,260	848,456	2.4
Audited 2016	1,642,067	597,960	1,044,107	2.7
Audited 2017	1,389,086	600,350	788,736	2.3
Projected 2018	954,034	593,748	360,286	1.6
Projected 2019	1,035,345	732,662	302,684	1.4
Projected 2020	1,561,678	871,574	690,104	1.8
Projected 2021	1,608,530	871,874	736,656	1.8
Projected 2022	1,941,160	871,673	1,069,487	2.2

Reviewer: Jeff Abshire
Date: June 12, 2018
Loan Number: B18-009, C18-008

**KENTUCKY INFRASTRUCTURE AUTHORITY
INFRASTRUCTURE REVOLVING LOAN FUND (FUND B)
HOPKINSVILLE ELECTRIC SYSTEM CHRISTIAN COUNTY
TELECOM PROJECT REVIEW**

I. PROJECT DESCRIPTION

The Hopkinsville Electric System (HES) Telecom Division is requesting a Fund B loan of \$2.5 million and a Fund C loan of \$1.8 million for a total of \$4.3 million for Phase 2 of the Fiber to Home project. This project will install fifty miles of aerial and fifteen miles of underground fiber to provide high speed internet with gigabit speed capability and voice services to 3,600 homes within the Hopkinsville city limits. The Division has about 3,500 customers with the expectation of adding an additional 900 as a result of this project.

Existing right of ways and utility easements will be used for installation which will significantly reduce the cost and time required to execute the project. Two additional phases with an estimated cost of \$8 - \$10 million are anticipated with Phase 3 beginning in 2020. Timing will ultimately depend on HES' success with Phase 2 as Phases 3 and 4 will be funded from free cash flow.

Phase 1 began in 2007 when HES needed more internet capacity and better pricing than was available from the larger providers. HES determined the best way to lower bandwidth cost and guarantee availability was to build fiber to a Tier 1 provider. Nashville and Bowling Green were evaluated with Bowling Green being selected for the \$3.0 million KIA funded (B07-06) project. The project benefitted both cities as well as other areas along the route as it permits HES to provide internet service to Clifty, Elkton and Russellville. HES also provides connections for other businesses including MuniNet.

HES has about a 30% market share with two primary national competitors who use a mix of copper, coax (Cable TV line) and limited fiber. The primary residential connections are copper and coax. Phase 2 is an underserved area with the expectation that HES will take share as a result of fiber availability. Limitations in competitors' service capacity and customer service will be contributing factors to share increase also. Pricing capacity is sensitive to competition and customers' willingness to pay for premium services.

There are not currently any technologies on the horizon that are being promoted as a replacement or close competitor for fiber connectivity and wireless networks have limitations and require more hands on management than fiber. Areas are deemed

covered by wireless (cellular) service when in reality the service is not capable of supporting video streaming or gaming for one or more devices in a home. Today's home may have ten or more devices connected to the internet including multiple gaming systems, TV's streaming video, tablets, smart phones and an increasing number of smart home devices.

HES is a member of MuniNet Fiber Agency who is also a KIA borrower. The ability to reach Tier 1 internet providers in Nashville and Bowling Green via MuniNet significantly reduced HES' cost of backbone internet connectivity. Each member is able to avoid costly local loop charges from larger national providers for delivering services directly to members. By combining member bandwidth purchases MuniNet is able to buy at 'bulk' pricing. Another benefit that is rarely mentioned is access to a Netflix caching server directly on MuniNet's network. The caching server reduces the amount of traffic going to Netflix and reduces congestion on HES internet connections.

II. PROJECT BUDGET

	<u>Total</u>
Legal Expenses	20,000
Planning	20,000
Engineering Fees - Design	120,000
Construction	1,930,407
Equipment	1,846,749
Contingency	362,844
Total	\$ 4,300,000

III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund B Loan	\$ 2,500,000	58%
Fund C Loan	1,800,000	42%
Total	\$ 4,300,000	100%

IV. KIA DEBT SERVICE

	<u>Fund B</u>	<u>Fund C</u>	<u>Total</u>
Amortized Loan Amount	2,500,000	1,800,000	4,300,000
Interest Rate	1.75%	3.00%	2.27%
Loan Term	20	20	20
Estimated Annual Debt Service	148,689	120,338	269,027
Administrative Fee (0.20%)	5,000	3,600	8,600
Annual Debt Service	153,689	123,938	277,627

V. PROJECT SCHEDULE

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

VI. RATE STRUCTURE

A. Customers

Customers	Current	Proposed	Total
Residential	2,988	900	3,888
Commercial	547	0	547
Total	3,535	900	4,435

B. Rates

Residential

8 meg download / 1 meg upload	37.95
8 meg download / 1 meg upload, Home wifi	42.95
Fiber - 50 meg download / 10 meg upload	59.95

Business

50 meg up to 1 gigabit download	quoted pricing
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VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility’s service area population was 32,442 with a Median Household Income (MHI) of \$38,561. The median household income for the Commonwealth is \$43,740. The Fund B loan will be at a 1.75% interest rate and the Fund C loan will be at a 3.0% rate for a blended rate of 2.27%.

Year	City	Population		Unemployment		
		% Change	County	% Change	Date	Rate
1980	27,318		66,878		June 2005	6.8%
1990	29,809	9.1%	68,941	3.1%	June 2010	11.6%
2000	30,089	0.9%	72,265	4.8%	June 2015	6.8%
2010	31,577	4.9%	73,955	2.3%	June 2017	7.3%
Current	32,442	2.7%	73,936	0.0%		
Cumulative %		18.8%		10.6%		

VIII. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2014 through June 30, 2017. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from operating expenses. While operating results are separated for the electric and telecom units the balance sheet is provided on a consolidated basis. A discussion of the balance sheet ratios and most related ratios are therefore limited. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

HISTORY

Revenues increased 10% from \$3.2 million to \$3.5 million from 2014 to 2017, respectively, while operating expenses increased 32% from \$1.6 million to \$2.1 million. Cash flow before debt service declined from \$1.6 million to \$1.4 million.

Debt service averaged \$600 thousand and the debt coverage ratio ranged from 2.3 to 2.7. Debt service is comprised of a ten year KIA loan that matures in 2023 and an allocation of a bond that was issued and secured by the Electric Division.

On a consolidated basis days sales outstanding is 38.5 and the current ratio is 0.8.

PROJECTIONS

Projections are based on the following assumptions:

- 1) The 2018 – 2022 forecast was provided by the applicant.
- 2) The take rate from competitors will be 25% with additional revenue from existing broadband customers that upgrade from their current service to fiber. Revenues will also increase due to additional business customers and initiatives in adjacent areas.
- 3) Debt service coverage ranges from 1.4 to 2.2 throughout the forecast period with cash flow after debt service ranging from \$303,000 to \$1,069,000.

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% (estimated \$215,000 total) of the final amount borrowed to be funded annually (estimated \$10,750 yearly) each December 1 for 20 years and maintained for the life of the loan. The Fund B reserve will be up to \$125,000 and the Fund C reserve will be up to \$90,000.

IX. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
KIA (B07-06)	\$ 1,825,095	2023
Total	\$ 1,825,095	

X. CONTACTS

Legal Applicant	
Entity Name	Hopkinsville Electric System - Telecom
Authorized Official	Jeff Hurd (General Manager)
County	Christian
Email	agibbs@hop-electric.com
Phone	(270) 887-4200
Address	1820 E. 9th Street Hopkinsville, KY 42240

Project Contact - Applicant	
Name	Richard Shaw
Organization	Hopkinsville Electric System
Email	rshaw@hop-electric.com
Phone	(270) 887-0762
Address	1820 E. 9th Street Hopkinsville, KY 42240

XI. RECOMMENDATIONS

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

**HOPKINSVILLE ELECTRIC SYSTEM
FINANCIAL SUMMARY (JUNE YEAR END)**

	Audited 2014	Audited 2015	Audited 2016	Audited 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022
Balance Sheet (Consolidated Electric and Telecom)									
Assets									
Current Assets	9,279,636	8,965,968	8,982,261	7,579,524	7,867,724	8,150,324	8,702,424	9,239,224	10,040,424
Other Assets	34,257,453	34,623,035	34,921,352	35,994,993	35,787,915	39,734,741	39,591,567	39,385,593	39,345,919
Total	43,537,089	43,589,003	43,903,613	43,574,517	43,655,639	47,885,065	48,293,991	48,624,817	49,386,343
Liabilities & Equity									
Current Liabilities	9,452,946	9,061,754	9,280,572	9,079,050	9,023,874	8,860,769	8,903,498	9,156,600	9,306,600
Long Term Liabilities	11,721,524	14,872,962	14,729,468	13,885,298	12,414,396	15,406,599	14,056,073	12,452,445	10,798,817
Total Liabilities	21,174,470	23,934,716	24,010,040	22,964,348	21,438,270	24,267,368	22,959,571	21,609,045	20,105,417
Net Assets	22,362,619	19,654,287	19,893,573	20,610,169	22,217,369	23,617,697	25,334,420	27,015,772	29,280,926
Cash Flow (Telecom Only)									
Revenues	3,182,589	3,303,237	3,530,598	3,496,385	3,238,634	3,724,825	4,354,345	4,377,158	4,732,875
Operating Expenses	1,599,160	1,856,521	1,888,531	2,107,299	2,284,600	2,689,480	2,792,667	2,768,629	2,791,715
Other Income	24	0	0	0	0	0	0	0	0
Cash Flow Before Debt Service	1,583,453	1,446,716	1,642,067	1,389,086	954,034	1,035,345	1,561,678	1,608,530	1,941,160
Debt Service									
Existing Debt Service	598,996	598,260	597,960	600,350	593,748	593,848	593,947	594,247	594,046
Proposed KIA Loan	0	0	0	0	0	138,814	277,627	277,627	277,627
Total Debt Service	598,996	598,260	597,960	600,350	593,748	732,662	871,574	871,874	871,673
Cash Flow After Debt Service	984,457	848,456	1,044,107	788,736	360,286	302,684	690,104	736,656	1,069,487
Ratios									
Current Ratio (Consolidated)	1.0	1.0	1.0	0.8	0.9	0.9	1.0	1.0	1.1
Debt Coverage Ratio (Telecom Division)	2.6	2.4	2.7	2.3	1.6	1.4	1.8	1.8	2.2

EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND B, INFRASTRUCTURE REVOLVING LOAN FUND		Reviewer Date KIA Loan Number WRIS Number	Meili Sun June 12, 2018 B18-010 WX21155022	
BORROWER		MARION COUNTY WATER DISTRICT MARION COUNTY		
BRIEF DESCRIPTION				
The proposed project consists of the installation of approximately 27,800 LF of 4-inch PVC waterline and appurtenances replacing existing undersized and aging lines along McElroy Pike and KY Hwy 289 in Marion County. The proposed project will upgrade and/or replace various aging, undersized, and inadequate infrastructure components throughout the distribution system. The improvements will ensure that the system can meet the demands of existing and future customers in a safe and efficient manner. 75 underserved households will see improved service, with the system better equipped to provide a safe and reliable supply of portable water.				
PROJECT FINANCING		PROJECT BUDGET		
Fund B Loan	\$950,000	RD Fee %	Actual %	
		Administrative Expenses		\$10,000
		Legal Expenses		5,000
		Eng - Design / Const	9.2%	8.5%
		Eng - Insp	6.0%	5.7%
		Eng - Other		10,000
		Construction		736,000
		Contingency		74,000
TOTAL	\$950,000	TOTAL		\$950,000
REPAYMENT	Rate	1.75%	Est. Annual Payment	\$58,402
	Term	20 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	Monarch Engineering, Inc.		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	Oct-18		
	Construction Start	Jan-19		
	Construction Stop	Jul-19		
DEBT PER CUSTOMER	Existing	\$426		
	Proposed	\$542		
RESIDENTIAL RATES		Users	Avg. Bill	
	Current	5,900	\$37.87 (for 4,000 gallons)	
	Additional	0	\$37.87 (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 2014	509,168	128,715	380,453	4.0
Audited 2015	463,702	145,570	318,132	3.2
Audited 2016	524,817	146,071	378,746	3.6
Projected 2017	510,123	160,756	349,367	3.2
Projected 2018	546,015	161,040	384,975	3.4
Projected 2019	579,850	161,294	418,557	3.6
Projected 2020	561,857	219,915	341,943	2.6
Projected 2021	545,952	220,103	325,849	2.5

Reviewer: Meili Sun
Date: June 12, 2018
Loan Number: B18-010

**KENTUCKY INFRASTRUCTURE AUTHORITY
INFRASTRUCTURE REVOLVING LOAN FUND (FUND B)
MARION COUNTY WATER DISTRICT, MARION COUNTY
PROJECT REVIEW
WX21155022**

I. PROJECT DESCRIPTION

The Marion County Water District is requesting a loan for \$950,000 to replace approximately 5 miles of 3 and 4 inch waterline along McElroy Pike and Hwy 289 with 4 inch PVC. The existing PVC waterline was installed in the 1970s and has a history of leaks, splits, and breaks, most likely due to improper installation. The proposed project will directly improve water quality and reliability within the distribution system.

The Marion County Water District purchases water primarily from the Lebanon Water Works. The water purchase and retail rates are regulated by the Kentucky Public Service Commission.

II. PROJECT BUDGET

	<u>Total</u>
Administrative Expenses	\$ 10,000
Legal Expenses	5,000
Engineering Fees – Design	69,000
Engineering Fees – Inspection	46,000
Engineering Fees – Other	10,000
Construction	736,000
Contingency	74,000
Total	\$ 950,000

III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
KIA Fund B Loan	\$ 950,000	100%
Total	\$ 950,000	

IV. KIA DEBT SERVICE

Amortized Loan Amount	\$ 950,000
Interest Rate	1.75%
Loan Term	20
Estimated Annual Debt Service	\$ 56,502
Administrative Fee (0.20%)	1,900
Annual Debt Service	\$ 58,402

V. PROJECT SCHEDULE

Bid Opening	October 2018
Construction Start	January 2019
Construction Stop	July 2019

VI. RATE STRUCTURE

A. Customers

Customers	Current
Residential	5,716
Commercial	171
Institutional/Other	13
Total	5,900

B. Rates

Date of Rate Increase	Retail		Water Purchase	
	Current	Proposed	Current	Proposed
Meter Charge	\$ 7.45	\$ 7.45	\$ 6.75	\$ 7.35
Per 100 Cubic Feet	5.65	6.98	2.50	3.35
(1 Cubic Feet = 7.43 Gallons)				
Cost for 4,000 gallons	\$ 37.87	\$ 45.03	\$ 20.21	\$ 25.38
Increase %		18.9%		25.6%
Affordability Index (Rate/MHI)	1.1%	1.3%		

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 14,661 with a Median Household Income (MHI) of \$42,453. The median household income for the Commonwealth is \$43,740. The project will qualify for a 1.75% interest rate.

Year	Population		County Unemployment	
	County	% Change	Date	Rate
1980	17,910		June 2005	6.2%
1990	16,499	-7.9%	June 2010	11.9%
2000	18,212	10.4%	June 2015	5.2%
2010	19,820	8.8%	June 2017	4.8%
Current	19,497	-1.6%		
Cumulative %		8.9%		

VIII. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2014 through June 30, 2016. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2014, 15, and 16 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented

HISTORY

Total revenues increased 2.0% from \$2.65 million in 2014 to \$2.70 million. Operating expenses increased 1.8% from \$2.22 million \$2.26 million during the same time period. The debt coverage ratio was 4.0, 3.2, and 3.6 for 2014, 2015, and 2016 respectively.

The balance sheet reflects a current ratio of 6.0, a debt to equity ratio of 0.3, 25.7 days sales in accounts receivable, and 9.4 months of operating expenses in unrestricted cash.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Total revenues will go up significantly in response to the increased cost of water purchased from the Lebanon Water Works. The Lebanon Water Works has filed a 25.6% wholesale rate increase with the PSC effective April 16, 2018. In order to offset the additional cost of purchased water, the District proposed an 18.9% retail rate increase. Both rate increases are currently pending PSC approval and are incorporated in the projections.
- 2) Water purchase cost will go up 25.6% with PSC approval. Operating expenses other than water purchase will increase 2% annually for general inflation.
- 3) Debt service coverage is 2.6 in 2020 when full year principal and interest repayments 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% (\$48,000 total) of the final amount borrowed to be funded annually (\$2,400 yearly) each December 1 for 20 years and maintained for the life of the loan.

IX. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
KIA Loan B12-06	\$ 489,639	2034
Citizens National Bank Note	688,198	2030
Water Revenue Bonds 2009 Series	<u>1,336,000</u>	2050
Total	\$ 2,513,837	

X. CONTACTS

Legal Applicant	
Name	Marion County Water District
Address	PO Box 528 Lebanon, KY 40033
County	Marion
Authorized Official	Jeff Preston, Chairperson
Phone	(270) 692-2004
Email	

Project Contact - Applicant	
Name	Jimmy Mudd
Representing	Marion County Water District
Address	PO Box 528, 1835 Campbellsville Rd Lebanon, KY 40033
Phone	(270) 692-2004
Email	Mcwdh2o@yahoo.com

Project Administrator/Engineer

Name	Lee Mudd, P.E.
Firm Name	Monarch Engineering, Inc.
Address	556 Carlton Drive Lawrenceburg, KY 40342
Phone	(502) 839-1310
Email	lmudd@monarchengineering.net

XI. RECOMMENDATIONS

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

**MARION COUNTY WATER DISTRICT
FINANCIAL SUMMARY (DECEMBER YEAR END)**

	Audited 2014	Audited 2015	Audited 2016	Projected 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021
Balance Sheet								
Assets								
Current Assets	1,978,961	2,051,135	2,043,223	2,113,053	2,207,448	2,310,160	2,378,548	2,443,718
Other Assets	13,090,214	13,026,663	13,155,286	12,853,206	12,755,131	13,610,171	13,453,920	13,284,794
Total	15,069,175	15,077,798	15,198,509	14,966,259	14,962,579	15,920,331	15,832,468	15,728,512
Liabilities & Equity								
Current Liabilities	337,270	340,114	338,106	343,283	348,562	353,998	359,497	364,551
Long Term Liabilities	2,629,081	3,059,722	3,040,926	2,943,669	2,852,558	3,708,511	3,611,465	3,511,965
Total Liabilities	2,966,351	3,399,836	3,379,032	3,286,952	3,201,120	4,062,509	3,970,962	3,876,516
Net Assets	12,102,824	11,677,962	11,819,477	11,679,307	11,761,459	11,857,822	11,861,506	11,851,996
Cash Flow								
Revenues	2,648,907	2,571,172	2,702,464	2,702,464	2,949,285	3,219,441	3,219,441	3,219,441
Operating Expenses	2,224,212	2,187,516	2,264,720	2,279,414	2,490,343	2,726,664	2,744,657	2,760,562
Other Income	84,473	80,046	87,073	87,073	87,073	87,073	87,073	87,073
Cash Flow Before Debt Service	509,168	463,702	524,817	510,123	546,015	579,850	561,857	545,952
Debt Service								
Existing Debt Service	128,715	145,570	146,071	160,756	161,040	161,294	161,513	161,701
Proposed KIA Loan	0	0	0	0	0	0	58,402	58,402
Total Debt Service	128,715	145,570	146,071	160,756	161,040	161,294	219,915	220,103
Cash Flow After Debt Service	380,453	318,132	378,746	349,367	384,975	418,557	341,943	325,849
Ratios								
Current Ratio	5.9	6.0	6.0	6.2	6.3	6.5	6.6	6.7
Debt to Equity	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Days Sales in Accounts Receivable	21.8	21.9	25.7	25.7	25.7	25.7	25.7	25.7
Months Operating Expenses in Unrestricted Cash	9.2	9.6	9.4	9.7	9.2	8.8	9.0	9.3
Debt Coverage Ratio	4.0	3.2	3.6	3.2	3.4	3.6	2.6	2.5

EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND B, INFRASTRUCTURE REVOLVING LOAN FUND		Reviewer Date KIA Loan Number WRIS Number	Ashley Adams June 12, 2018 B18-011 WX21089035	
BORROWER		CANNONSBURG WATER DISTRICT BOYD COUNTY		
BRIEF DESCRIPTION				
This project will construct approximately 2,400 LF of 6 inch PVC to extend service to six households on Culp Creek Road in Greenup County. The project also includes installation of one fire hydrant, six waterline taps, and six radio read meters. The project will address a public health emergency in which an abandoned oil well is seeping out of a hillside and impacting drinking water wells for the project households.				
PROJECT FINANCING		PROJECT BUDGET		
Fund B Loan	\$85,000	RD Fee %	Actual %	
		Administrative Expenses	\$1,100	
		Legal Expenses	10,000	
		Eng - Design / Const	14.3% 11.2% 9,500	
		Construction	40,000	
		Equipment	19,500	
		Contingency	4,900	
TOTAL	\$85,000	TOTAL	\$85,000	
REPAYMENT	Rate Term	1.75% 20 Years	Est. Annual Payment 1st Payment 6 Mo. after first draw \$5,225	
PROFESSIONAL SERVICES	Engineer Bond Counsel	EN Engineering Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening Construction Start Construction Stop	N/A - Emergency Project Jun-18 Jun-18		
DEBT PER CUSTOMER	Existing Proposed	\$544 \$552		
OTHER DEBT	See Attached			
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached			
RESIDENTIAL RATES	Current Additional	Users 3,532 6	Avg. Bill \$42.68 (for 4,000 gallons) \$42.68 (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 2014	259,904	54,541	205,363	4.8
Audited 2015	246,927	83,872	163,055	2.9
Audited 2016	235,331	78,757	156,574	3.0
Projected 2017	253,048	83,211	169,837	3.0
Projected 2018	231,224	106,299	124,925	2.2
Projected 2019	208,964	109,837	99,127	1.9
Projected 2020	186,259	111,062	75,197	1.7
Projected 2021	163,099	114,165	48,934	1.4

Reviewer: Ashley Adams
Date: June 12, 2018
Loan Number: B18-011

**KENTUCKY INFRASTRUCTURE AUTHORITY
INFRASTRUCTURE REVOLVING LOAN FUND (FUND B)
CANNONSBURG WATER DISTRICT, BOYD COUNTY
PROJECT REVIEW
WX21089035**

I. PROJECT DESCRIPTION

The Cannonsburg Water District is requesting a Fund B loan in the amount of \$85,000 for the Culp Creek Road Emergency Waterline Extension project. This project will construct approximately 2,400 linear feet (LF) of 6 inch PVC line to extend service from Cannonsburg Water District to serve six households on Culp Creek Road in Greenup County. The project will also include installation of one fire hydrant, six waterline taps, and six radio read meters. This project is needed to address a public health emergency. On March 6, 2018 the Energy and Environment Cabinet's Environmental Response Branch was made aware of an abandoned oil well seeping out of a hillside and impacting drinking water wells in Greenup County. Kentucky Division of Water notified Cannonsburg Water District that the rupture permanently contaminated the ground water that supplies the wells the residents use as their only water source. This project is needed to supply safe, potable water to those households.

In addition to addressing a public health emergency, this project will also improve the service for twelve existing customers by adding an additional flushing point in the system. Cannonsburg Water District is currently under an agreed order with Kentucky Division of Water for disinfection byproducts and the additional flushing point will address water quality concerns in a low usage area of Cannonsburg's distribution system.

II. PROJECT BUDGET

Administrative Expenses	\$	1,100
Legal Expenses		10,000
Engineering Fees - Design		9,500
Construction		40,000
Equipment		19,500
Contingency		4,900
Total	\$	85,000

III. PROJECT FUNDING

	Amount	%
Fund B Loan	\$ 85,000	100%
Total	\$ 85,000	100%

IV. KIA DEBT SERVICE

Amortized Loan Amount	\$ 85,000
Interest Rate	1.75%
Loan Term (Years)	20
Estimated Annual Debt Service	\$ 5,055
Administrative Fee (0.20%)	170
Total Estimated Annual Debt Service	\$ 5,225

V. PROJECT SCHEDULE

Construction Start	June 2018
Construction Stop	June 2018

VI. RATE STRUCTURE

A. Customers

Customers	Current	Proposed	Total
Residential	3,241	6	3,247
Commercial	288		288
Industrial	3		3
Total	3,532	6	3,538

B. Rates

	Current	Prior
Date of Last Rate Increase	01/01/17	07/08/15
Minimum (2,000 gallons)	\$ 24.34	\$ 24.00
Next 3,000 Gallons	9.17	9.00
Next 15,000 Gallons	8.42	8.25
Cost for 4,000 gallons	\$ 42.68	\$ 42.00
Increase %	1.6%	
Affordability Index (Rate/MHI)	1.0%	

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 8,953 with a Median Household Income (MHI) of \$52,920. The median household income for the Commonwealth is \$43,740. The project will qualify for a 1.75% interest rate because the District has an Agreed Order against the system and the project will help to address it.

Year	Population		County Unemployment	
	County	% Change	Date	Rate
1980	55,513		June 2005	5.4%
1990	51,150	-7.9%	June 2010	14.4%
2000	49,752	-2.7%	June 2015	5.8%
2010	49,542	-0.4%	June 2017	5.1%
Current	48,716	-1.7%		
Cumulative %		-12.2%		

VIII. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended December 31, 2014 through December 31, 2016. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2015 and 2016 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented

HISTORY

Revenues decreased 2% from \$2.6 million to \$2.5 million from 2014 to 2016. Operating expenses decreased 1.5% from \$2.3 million to \$2.27 million during the same time period. The debt coverage ratio was 4.8, 2.9, and 3.0 from 2014-2016.

The 2016 balance sheet reflects a current ratio of 3.0, a debt to equity ratio of 0.7, and 40.6 days sales in accounts receivable.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues increased 1.6% in 2017 based on a prior rate increase and will then remain flat.
- 2) Expenses will increase 2% yearly for inflation.
- 3) Debt service coverage is 1.9 in 2019 when principal and interest repayments begin.

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

REPLACEMENT RESERVE

There will be no replacement reserve requirement for this loan. The District maintains a depreciation reserve fund that held \$16,867 as of December 31, 2016.

IX. DEBT OBLIGATIONS

	Outstanding	Maturity
KRWFC	\$ 255,000	2025
USDA	1,668,000	2055
Total	\$ 1,923,000	

X. CONTACTS

Legal Applicant	
Entity Name	Cannonsburg Water District
Authorized Official	Robert McGuire (Chairman)
County	Boyd
Email	danny@cannonsburg.com
Phone	606-928-9808
Address	1606 Cannonsburg Road Ashland, KY 41102

Applicant Contact	
Name	Tim Webb
Organization	Cannonsburg Water District
Email	tim@cannonsburgwater.com
Phone	606-232-6054
Address	1606 Cannonsburg Road Ashland, KY 41102

Project Administrator

Name	Duane Spears
Organization	FIVCO Area Development District
Email	duane@fivco.org
Phone	606-929-1366
Address	32 FIVCO Court Grayson, KY 41143

Consulting Engineer

PE Name	David Gibson
Firm Name	EN Engineering
Email	dgibson@enengineering.com
Phone	606-653-1400
Address	8308 Lake Bonita Rd #300 Catlettsburg, KY 41129

XI. RECOMMENDATIONS

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

**CANNONBURG WATER DISTRICT
FINANCIAL SUMMARY (DECEMBER YEAR END)**

	Audited 2014	Audited 2015	Audited 2016	Projected 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021
Balance Sheet								
Assets								
Current Assets	729,342	699,880	787,144	825,483	850,468	870,294	885,333	895,120
Other Assets	4,053,971	5,470,803	6,310,003	6,082,967	6,114,524	6,038,317	5,942,967	5,826,606
Total	4,783,313	6,170,683	7,097,147	6,908,450	6,964,992	6,908,611	6,828,300	6,721,726
Liabilities & Equity								
Current Liabilities	322,431	297,786	266,716	295,191	300,791	307,491	317,291	327,191
Long Term Liabilities	271,000	2,103,251	2,765,552	2,725,552	2,769,552	2,726,552	2,678,552	2,625,552
Total Liabilities	593,431	2,401,037	3,032,268	3,020,743	3,070,343	3,034,043	2,995,843	2,952,743
Net Assets	4,189,882	3,769,646	4,064,879	3,887,707	3,894,649	3,874,568	3,832,457	3,768,983
Cash Flow								
Revenues	2,565,796	2,525,413	2,508,250	2,547,363	2,547,363	2,547,363	2,547,363	2,547,363
Operating Expenses	2,309,795	2,281,319	2,275,941	2,297,337	2,319,161	2,341,421	2,364,126	2,387,286
Other Income	3,903	2,833	3,022	3,022	3,022	3,022	3,022	3,022
Cash Flow Before Debt Service	259,904	246,927	235,331	253,048	231,224	208,964	186,259	163,099
Debt Service								
Existing Debt Service	54,541	83,872	78,757	83,211	106,299	104,612	105,837	108,940
Proposed KIA Loan	0	0	0	0	0	5,225	5,225	5,225
Total Debt Service	54,541	83,872	78,757	83,211	106,299	109,837	111,062	114,165
Cash Flow After Debt Service	205,363	163,055	156,574	169,837	124,925	99,127	75,197	48,934
Ratios								
Current Ratio	2.3	2.4	3.0	2.8	2.8	2.8	2.8	2.7
Debt to Equity	0.1	0.6	0.7	0.8	0.8	0.8	0.8	0.8
Days Sales in Accounts Receivable	37.2	41.7	40.6	40.6	40.6	40.6	40.6	40.6
Months Operating Expenses in Unrestricted Cash	1.9	1.8	2.0	2.2	2.3	2.4	2.4	2.5
Debt Coverage Ratio	4.8	2.9	3.0	3.0	2.2	1.9	1.7	1.4

EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND C, GOVERNMENTAL AGENCIES FUND REVOLVING LOAN FUND		Reviewer	Jeff Abshire	
		Date	June 12, 2018	
		KIA Loan Number	C12-01 (Increase)	
		WRIS Number	Not Applicable	
BORROWER	MUNINET FIBER AGENCY MCCRACKEN COUNTY			
BRIEF DESCRIPTION				
This increase request is to fund cost overages that were primarily due to a change from hanging fiber to existing poles to buried fiber. The change was necessitated by the excessive cost of the pole set ups.				
The Muninet Fiber Agency is requesting a Fund C loan in the amount of \$3,173,049 for the fiber optic cable build project #2. This project is for the construction and acquisition of 144 count fiber that will extend from Paducah to the TVA Paradise Fossil Plant. It will also include the acquisition of Indefeasible Rights to Use (IRUs) from member utilities which include Hopkinsville, Glasgow, Russellville and Princeton to connect and expand their networks. In exchange for the fiber to TVA plants, TVA will provide MuniNet fiber from the plant to Nashville, Tennessee and from Hopkinsville to Bowling Green. This will allow MuniNet to connect to Level 3 and get access to internet bandwidth at a much lower cost than they are currently paying. This fiber will connect local hospitals, health care providers, emergency services, libraries, and local government agencies allowing them to perform functions not currently possible. In addition, this fiber will be open access and available to anyone.				
PROJECT FINANCING		PROJECT BUDGET		
Fund C Loan	\$3,687,049	RD Fee %	Actual %	
		Construction		3,179,449
		Equipment		507,600
TOTAL	\$3,687,049	TOTAL		\$3,687,049
REPAYMENT	Rate	3.00%	Est. Annual Payment	\$253,869
	Term	20 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	0		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Construction Stop	Mar-18		
OTHER DEBT	See Attached			
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached			
RESIDENTIAL RATES		Users	Avg. Bill	
	Current	201	\$0.00 (for 4,000 gallons)	
	Additional	0	\$0.00 (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 2014	328,735	142,034	186,701	2.3
Audited 2015	460,211	262,404	197,807	1.8
Audited 2016	408,078	259,524	148,554	1.6
Audited 2017	516,225	284,588	231,637	1.8
Projected 2018	393,117	393,117	0	1.0
Projected 2019	516,364	516,364	0	1.0
Projected 2020	516,364	516,364	0	1.0
Projected 2021	516,364	516,364	0	1.0
Projected 2022	516,364	516,364	0	1.0

Reviewer: Jeff Abshire
Date: June 12, 2018
C12-01
Loan Number: (Increase)

**KENTUCKY INFRASTRUCTURE AUTHORITY
GOVERNMENTAL AGENCIES LOAN FUND (FUND C)
MUNINET FIBER AGENCY, MCCRACKEN COUNTY
PROJECT REVIEW**

I. PROJECT DESCRIPTION

MuniNet Fiber Agency is requesting a increase of \$514,000 to a previously approved Fund C loan in the amount of \$3,173,049 for the fiber optic cable build project #2. The project was originally planned to be an aerial construction. However, the cost of the pole setups was significantly less at the time the project was planned resulting in a decision to change to buried fiber construction which is more expensive than aerial.

The original project scope was for the construction and acquisition of 144 count fiber that will extend from Paducah to the TVA Paradise Fossil Plant. It will also include the acquisition of Indefeasible Rights to Use (IRUs) from member utilities which include Hopkinsville, Glasgow, Russellville and Princeton to connect and expand their networks. In exchange for the fiber to TVA plants, TVA will provide MuniNet fiber from the plant to Nashville, Tennessee and from Hopkinsville to Bowling Green. This will allow MuniNet to connect to Level 3 and get access to internet bandwidth at a much lower cost than they are currently paying (from \$35/megabyte to \$1.85/megabyte). The fiber will connect local hospitals, health care providers, emergency services, libraries, and local government agencies allowing them to perform functions not currently possible. In addition, it will be open access and available to anyone.

The original project reflected significantly more customers and revenue than are projected today. The ability to reach Tier 1 internet providers in Nashville and Bowling Green via MuniNet significantly reduced members' cost of backbone internet connectivity which enabled them to avoid costly local loop charges from larger national providers. By combining member bandwidth purchases MuniNet is able to buy at 'bulk' pricing. Another benefit that is rarely mentioned is access to a Netflix caching server directly on MuniNet's network. The caching server reduces the amount of traffic going to Netflix and reduces congestion on members' internet connections.

MuniNet Fiber Agency was formed as a joint agency pursuant to Section 65.210 to 65.300 of the Kentucky Revised Statutes, as amended, known as the Interlocal Cooperation Act. An Interlocal Agreement dated October 25, 2010 was executed

between the Electric Plant Board of the City of Paducah and Electric Plant Board of the City of Murray to form the agency. MuniNet is governed by a Board of Directors composed of two Directors designated by each member of the Agency (one designee must be the Chief Executive Officer). Current members are Murray Electric System, Mayfield Electric and Water System, Paducah Power System, Princeton Electric Plant Board, Hopkinsville Electric System, Russellville Electric Plant Board, and Glasgow Electric Plant Board.

II. PROJECT BUDGET

	<u>Total</u>
Construction	\$ 3,179,449
Equipment	507,600
Total	\$ 3,687,049

III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund C Loan	\$ 3,173,049	100%

IV. KIA DEBT SERVICE

Amortized Loan Amount	\$ 3,687,049
Interest Rate	3.00%
Loan Term (20 Years)	20
Estimated Annual Debt Service	\$ 246,495
Administrative Fee (0.20%)	7,374
Annual Debt Service (to Cash Flow)	253,869

V. PROJECT SCHEDULE

The project was completed in early 2018.

VI. CUSTOMERS AND RATE STRUCTURE

A) Customers - MuniNet has 201 commercial customers.

B) Rates - Fixed Rate Point-to Point prices are as follows:

Circuit	Price	Circuit	Price
5 Mbps	\$70	100 Mbps	\$225
10 Mbps	\$105	1 Gbps	\$1,450
20 Mbps	\$150	10 Gbps	\$4,500
30 Mbps	\$175		

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, McCracken County's population was 65,451 with a Median Household Income (MHI) of \$42,303. The median household income for the Commonwealth is \$43,740. All Fund "C" loans are at a 3% interest rate.

VIII. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2014 through June 30, 2017.

HISTORICAL

Revenues increased 15% from \$501,934 to \$578,328 while operating expenses averaged about \$471,000. The average member contribution was \$361,000. Debt service declined from 2.3 in 2014 to 1.8, 1.6, and 1.8 in 2015, 2016, and 2017, respectively.

The balance sheet reflects 3.2 months of operating expenses in unrestricted cash.

PROJECTED

Projections are based on the following assumptions:

- 1) The 2018 to 2022 forecast was provided by the applicant.
- 2) Member contributions will fund any cash flow shortfalls to ensure that the debt coverage ratio remains at or above 1.0.
- 3) Debt service coverage is 1.0 throughout the forecast period based on the minimum required funding from members.

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

REPLACEMENT RESERVE

The annual replacement cost is \$9,200. This amount should be added to the replacement account each December 1 until the balance reaches \$92,000 and maintained for the life of the loan.

IX. DEBT OBLIGATIONS

Description	Outstanding	Maturity
KIA (B09-02)	\$ 1,712,393	2030
KIA (B11-09)	1,775,736	2034
KIA (C12-01, i/a/o \$3.173M)	1,997,492	2038
Total	\$ 5,485,621	

X. CONTACTS

Legal Applicant	
Entity Name	MuniNet Fiber Agency
Authorized Official	Tony Thompson (Chair)
County	McCracken
Email	tthompson@murrayelectric.net
Phone	(270) 762-1704
Address	P.O. Box 1095 Murray, KY 42071

Project Contact - Applicant	
Name	Debra Adams
Organization	MuniNet Fiber Agency
Email	djadams@murray-ky.net
Phone	270-762-1717
Address	PO Box 1095 Murray, KY 42071

XI. RECOMMENDATIONS

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

MUNINET FIBER AGENCY
FINANCIAL SUMMARY (JUNE YEAR END)

	Audited	Audited	Audited	Audited	Projected	Projected	Projected	Projected	Projected
	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Balance Sheet									
Assets									
Current Assets	169,965	130,030	133,204	161,163	138,869	138,869	138,869	138,869	138,869
Other Assets	7,114,251	6,726,503	6,530,572	7,220,391	8,098,826	8,139,526	7,666,226	7,180,426	6,694,626
Total	7,284,216	6,856,533	6,663,776	7,381,554	8,237,695	8,278,395	7,805,095	7,319,295	6,833,495
Liabilities & Equity									
Current Liabilities	1,532,957	1,249,930	1,206,556	1,596,297	1,592,296	1,600,231	1,608,359	1,616,686	1,625,217
Long Term Liabilities	5,355,624	5,146,067	4,983,685	5,174,616	5,999,169	6,154,230	5,787,163	5,411,769	5,027,844
Total Liabilities	6,888,581	6,395,997	6,190,241	6,770,913	7,591,465	7,754,461	7,395,522	7,028,455	6,653,061
Net Assets	395,635	460,536	473,535	610,641	646,230	523,934	409,573	290,840	180,434
Cash Flow									
Revenues	501,934	540,782	531,857	578,328	621,278	646,271	671,695	698,563	726,506
Operating Expenses	476,437	480,140	496,285	430,671	425,000	434,200	434,200	421,700	421,700
Other Income	303,238	399,569	372,506	368,568	196,839	304,293	278,869	239,501	211,558
Cash Flow Before Debt Service	328,735	460,211	408,078	516,225	393,117	516,364	516,364	516,364	516,364
Debt Service									
Debt Service	142,034	262,404	259,524	284,588	393,117	516,364	516,364	516,364	516,364
Cash Flow After Debt Service	186,701	197,807	148,554	231,637	0	0	0	0	0
Ratios									
Current Ratio	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Debt to Equity	17.4	13.9	13.1	11.1	11.7	14.8	18.1	24.2	36.9
Days Sales in Accounts Receivable	(3.3)	(0.6)	0.6	(0.2)	0.0	0.0	0.0	0.0	0.0
Months Operating Expenses in Unrestricted Cash	3.1	2.6	2.8	3.2	3.4	3.4	3.4	3.4	3.4
Debt Coverage Ratio	2.3	1.8	1.6	1.8	1.0	1.0	1.0	1.0	1.0

EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND B, INFRASTRUCTURE REVOLVING LOAN FUND		Reviewer	Jeff Abshire	
		Date	June 12, 2018	
		KIA Loan Number	B18-009, C18-008	
BORROWER	HOPKINSVILLE ELECTRIC SYSTEM CHRISTIAN COUNTY			
BRIEF DESCRIPTION				
This project will install sixty-five miles of fiber to provide high speed internet with gigabit speed capability to 3,600 homes within the Hopkinsville city limits. Voice services will also be provided.				
PROJECT FINANCING		PROJECT BUDGET		
Fund B Loan	\$2,500,000	RD Fee %	Actual %	
Fund C Loan	1,800,000	Legal Expenses		20,000
		Planning		20,000
		Eng - Technical Services		120,000
		Construction		1,930,407
		Equipment		1,846,749
		Contingency		362,844
TOTAL	\$4,300,000	TOTAL		\$4,300,000
REPAYMENT	Rate	1.75%	Est. Annual Payment	\$153,689
	Term	20 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	n/a		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	Jun-18		
	Construction Start	Aug-18		
	Construction Stop	Jan-19		
DEBT PER CUSTOMER	Existing	\$2,258		
	Proposed	\$2,141		
OTHER DEBT	See Attached			
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	3,535	\$60.00	
	Additional	900	\$60.00	
REGIONAL COORDINATION	n/a			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2014	1,583,453	598,996	984,457	2.6
Audited 2015	1,446,716	598,260	848,456	2.4
Audited 2016	1,642,067	597,960	1,044,107	2.7
Audited 2017	1,389,086	600,350	788,736	2.3
Projected 2018	954,034	593,748	360,286	1.6
Projected 2019	1,035,345	732,662	302,684	1.4
Projected 2020	1,561,678	871,574	690,104	1.8
Projected 2021	1,608,530	871,874	736,656	1.8
Projected 2022	1,941,160	871,673	1,069,487	2.2

Reviewer: Jeff Abshire
Date: June 12, 2018
Loan Number: B18-009, C18-008

**KENTUCKY INFRASTRUCTURE AUTHORITY
INFRASTRUCTURE REVOLVING LOAN FUND (FUND B)
HOPKINSVILLE ELECTRIC SYSTEM CHRISTIAN COUNTY
TELECOM PROJECT REVIEW**

I. PROJECT DESCRIPTION

The Hopkinsville Electric System (HES) Telecom Division is requesting a Fund B loan of \$2.5 million and a Fund C loan of \$1.8 million for a total of \$4.3 million for Phase 2 of the Fiber to Home project. This project will install fifty miles of aerial and fifteen miles of underground fiber to provide high speed internet with gigabit speed capability and voice services to 3,600 homes within the Hopkinsville city limits. The Division has about 3,500 customers with the expectation of adding an additional 900 as a result of this project.

Existing right of ways and utility easements will be used for installation which will significantly reduce the cost and time required to execute the project. Two additional phases with an estimated cost of \$8 - \$10 million are anticipated with Phase 3 beginning in 2020. Timing will ultimately depend on HES' success with Phase 2 as Phases 3 and 4 will be funded from free cash flow.

Phase 1 began in 2007 when HES needed more internet capacity and better pricing than was available from the larger providers. HES determined the best way to lower bandwidth cost and guarantee availability was to build fiber to a Tier 1 provider. Nashville and Bowling Green were evaluated with Bowling Green being selected for the \$3.0 million KIA funded (B07-06) project. The project benefitted both cities as well as other areas along the route as it permits HES to provide internet service to Clifty, Elkton and Russellville. HES also provides connections for other businesses including MuniNet.

HES has about a 30% market share with two primary national competitors who use a mix of copper, coax (Cable TV line) and limited fiber. The primary residential connections are copper and coax. Phase 2 is an underserved area with the expectation that HES will take share as a result of fiber availability. Limitations in competitors' service capacity and customer service will be contributing factors to share increase also. Pricing capacity is sensitive to competition and customers' willingness to pay for premium services.

There are not currently any technologies on the horizon that are being promoted as a replacement or close competitor for fiber connectivity and wireless networks have limitations and require more hands on management than fiber. Areas are deemed

covered by wireless (cellular) service when in reality the service is not capable of supporting video streaming or gaming for one or more devices in a home. Today's home may have ten or more devices connected to the internet including multiple gaming systems, TV's streaming video, tablets, smart phones and an increasing number of smart home devices.

HES is a member of MuniNet Fiber Agency who is also a KIA borrower. The ability to reach Tier 1 internet providers in Nashville and Bowling Green via MuniNet significantly reduced HES' cost of backbone internet connectivity. Each member is able to avoid costly local loop charges from larger national providers for delivering services directly to members. By combining member bandwidth purchases MuniNet is able to buy at 'bulk' pricing. Another benefit that is rarely mentioned is access to a Netflix caching server directly on MuniNet's network. The caching server reduces the amount of traffic going to Netflix and reduces congestion on HES internet connections.

II. PROJECT BUDGET

	<u>Total</u>
Legal Expenses	20,000
Planning	20,000
Engineering Fees - Design	120,000
Construction	1,930,407
Equipment	1,846,749
Contingency	362,844
Total	\$ 4,300,000

III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund B Loan	\$ 2,500,000	58%
Fund C Loan	1,800,000	42%
Total	\$ 4,300,000	100%

IV. KIA DEBT SERVICE

	<u>Fund B</u>	<u>Fund C</u>	<u>Total</u>
Amortized Loan Amount	2,500,000	1,800,000	4,300,000
Interest Rate	1.75%	3.00%	2.27%
Loan Term	20	20	20
Estimated Annual Debt Service	148,689	120,338	269,027
Administrative Fee (0.20%)	5,000	3,600	8,600
Annual Debt Service	153,689	123,938	277,627

V. PROJECT SCHEDULE

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

VI. RATE STRUCTURE

A. Customers

Customers	Current	Proposed	Total
Residential	2,988	900	3,888
Commercial	547	0	547
Total	3,535	900	4,435

B. Rates

Residential

8 meg download / 1 meg upload	37.95
8 meg download / 1 meg upload, Home wifi	42.95
Fiber - 50 meg download / 10 meg upload	59.95

Business

50 meg uo to 1 gigabit download	quoted pricing
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VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility’s service area population was 32,442 with a Median Household Income (MHI) of \$38,561. The median household income for the Commonwealth is \$43,740. The Fund B loan will be at a 1.75% interest rate and the Fund C loan will be at a 3.0% rate for a blended rate of 2.27%.

Year	City	Population		Unemployment		
		% Change	County	% Change	Date	Rate
1980	27,318		66,878		June 2005	6.8%
1990	29,809	9.1%	68,941	3.1%	June 2010	11.6%
2000	30,089	0.9%	72,265	4.8%	June 2015	6.8%
2010	31,577	4.9%	73,955	2.3%	June 2017	7.3%
Current	32,442	2.7%	73,936	0.0%		
Cumulative %		18.8%		10.6%		

VIII. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2014 through June 30, 2017. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from operating expenses. While operating results are separated for the electric and telecom units the balance sheet is provided on a consolidated basis. A discussion of the balance sheet ratios and most related ratios are therefore limited. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

HISTORY

Revenues increased 10% from \$3.2 million to \$3.5 million from 2014 to 2017, respectively, while operating expenses increased 32% from \$1.6 million to \$2.1 million. Cash flow before debt service declined from \$1.6 million to \$1.4 million.

Debt service averaged \$600 thousand and the debt coverage ratio ranged from 2.3 to 2.7. Debt service is comprised of a ten year KIA loan that matures in 2023 and an allocation of a bond that was issued and secured by the Electric Division.

On a consolidated basis days sales outstanding is 38.5 and the current ratio is 0.8.

PROJECTIONS

Projections are based on the following assumptions:

- 1) The 2018 – 2022 forecast was provided by the applicant.
- 2) The take rate from competitors will be 25% with additional revenue from existing broadband customers that upgrade from their current service to fiber. Revenues will also increase due to additional business customers and initiatives in adjacent areas.
- 3) Debt service coverage ranges from 1.4 to 2.2 throughout the forecast period with cash flow after debt service ranging from \$303,000 to \$1,069,000.

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% (estimated \$215,000 total) of the final amount borrowed to be funded annually (estimated \$10,750 yearly) each December 1 for 20 years and maintained for the life of the loan. The Fund B reserve will be up to \$125,000 and the Fund C reserve will be up to \$90,000.

IX. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
KIA (B07-06)	\$ 1,825,095	2023
Total	\$ 1,825,095	

X. CONTACTS

Legal Applicant	
Entity Name	Hopkinsville Electric System - Telecom
Authorized Official	Jeff Hurd (General Manager)
County	Christian
Email	agibbs@hop-electric.com
Phone	(270) 887-4200
Address	1820 E. 9th Street Hopkinsville, KY 42240

Project Contact - Applicant	
Name	Richard Shaw
Organization	Hopkinsville Electric System
Email	rshaw@hop-electric.com
Phone	(270) 887-0762
Address	1820 E. 9th Street Hopkinsville, KY 42240

XI. RECOMMENDATIONS

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

**HOPKINSVILLE ELECTRIC SYSTEM
FINANCIAL SUMMARY (JUNE YEAR END)**

	Audited 2014	Audited 2015	Audited 2016	Audited 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022
Balance Sheet (Consolidated Electric and Telecom)									
Assets									
Current Assets	9,279,636	8,965,968	8,982,261	7,579,524	7,867,724	8,150,324	8,702,424	9,239,224	10,040,424
Other Assets	34,257,453	34,623,035	34,921,352	35,994,993	35,787,915	39,734,741	39,591,567	39,385,593	39,345,919
Total	43,537,089	43,589,003	43,903,613	43,574,517	43,655,639	47,885,065	48,293,991	48,624,817	49,386,343
Liabilities & Equity									
Current Liabilities	9,452,946	9,061,754	9,280,572	9,079,050	9,023,874	8,860,769	8,903,498	9,156,600	9,306,600
Long Term Liabilities	11,721,524	14,872,962	14,729,468	13,885,298	12,414,396	15,406,599	14,056,073	12,452,445	10,798,817
Total Liabilities	21,174,470	23,934,716	24,010,040	22,964,348	21,438,270	24,267,368	22,959,571	21,609,045	20,105,417
Net Assets	22,362,619	19,654,287	19,893,573	20,610,169	22,217,369	23,617,697	25,334,420	27,015,772	29,280,926
Cash Flow (Telecom Only)									
Revenues	3,182,589	3,303,237	3,530,598	3,496,385	3,238,634	3,724,825	4,354,345	4,377,158	4,732,875
Operating Expenses	1,599,160	1,856,521	1,888,531	2,107,299	2,284,600	2,689,480	2,792,667	2,768,629	2,791,715
Other Income	24	0	0	0	0	0	0	0	0
Cash Flow Before Debt Service	1,583,453	1,446,716	1,642,067	1,389,086	954,034	1,035,345	1,561,678	1,608,530	1,941,160
Debt Service									
Existing Debt Service	598,996	598,260	597,960	600,350	593,748	593,848	593,947	594,247	594,046
Proposed KIA Loan	0	0	0	0	0	138,814	277,627	277,627	277,627
Total Debt Service	598,996	598,260	597,960	600,350	593,748	732,662	871,574	871,874	871,673
Cash Flow After Debt Service	984,457	848,456	1,044,107	788,736	360,286	302,684	690,104	736,656	1,069,487
Ratios									
Current Ratio (Consolidated)	1.0	1.0	1.0	0.8	0.9	0.9	1.0	1.0	1.1
Debt Coverage Ratio (Telecom Division)	2.6	2.4	2.7	2.3	1.6	1.4	1.8	1.8	2.2

EXECUTIVE SUMMARY		Reviewer	Melissa Rife	
KENTUCKY INFRASTRUCTURE AUTHORITY		Date	June 12, 2018	
FUND F, FEDERALLY ASSISTED DRINKING WATER		KIA Loan Number	F15-002 Increase #2	
REVOLVING LOAN FUND		WRIS Number	WX21171045	
BORROWER		MONROE COUNTY WATER DISTRICT MONROE COUNTY		
BRIEF DESCRIPTION				
The Monroe County Water District is requesting an additional increase of \$111,347 to complete the project.				
The Monroe County Water District is requesting an increase of \$3,550,694 to a previously approved \$12,013,638 loan for the Regional Water Treatment Plant and System Improvements Project. The project was presented in July 2015 and has since been competitively bid in three contracts. The increase will cover the overage required from the lowest bidder to complete the project. The original project description is below:				
This project involves the construction of a new water intake, a 600,000 water storage tank, one pump station, transmission lines and a two million gallon per day water treatment plant. The District currently purchases potable water from the City of Tompkinsville, which has frequently experienced water shortages, particularly during drought periods. The City's water source is Mill Creek Lake, which has limited capacity during low rainfall periods. The proposed water treatment plant will source water from the Cumberland River.				
PROJECT FINANCING		PROJECT BUDGET		
Fund F Loan	\$15,675,679	Administrative Expenses		\$30,930
HB 235 8N-2014	320,096	Legal Expenses		40,895
HB 235 6N-2014	78,266	Land, Easements		148,244
		Eng - Design / Const	6.4%	1.0%
		Eng - Insp	4.1%	1.6%
		Eng - Other		5,921
		Construction		15,238,130
		Other		208,335
TOTAL	\$16,074,041	TOTAL		\$16,074,041
REPAYMENT	Rate	0.50%	Est. Annual Payment	\$4,430
	Term	30 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	Stigall Engineering Associates, Inc		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	September 2015		
	Construction Start	July 2016		
	Construction Stop	October 2018		
DEBT PER CUSTOMER	Existing	\$3,614		
	Proposed	\$4,748		
OTHER DEBT		See Attached		
OTHER STATE-FUNDED PROJECTS LAST 5 YRS		See Attached		
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	3,470	\$40.71	(for 4,000 gallons)
	Additional	0	\$40.71	(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 2014	389,846	217,144	172,702	1.8
Audited 2015	376,453	216,146	160,307	1.7
Audited 2016	371,370	217,415	153,955	1.7
Audited 2017	224,776	310,984	(86,208)	0.7
Projected 2018	623,864	45,000	578,864	13.9
Projected 2019	969,996	448,515	521,482	2.2
Projected 2020	943,865	700,195	243,670	1.3
Projected 2021	917,212	702,249	214,963	1.3
Projected 2022	890,025	704,054	185,971	1.3

Reviewer: Melissa Rife
Date: June 12, 2018
Loan Number: F15-002 Increase

**KENTUCKY INFRASTRUCTURE AUTHORITY
DRINKING WATER STATE REVOLVING FUND (FUND F)
MONROE COUNTY WATER DISTRICT, MONROE COUNTY
PROJECT REVIEW
WX21171045**

I. PROJECT DESCRIPTION

The Monroe County Water District (“District”) is requesting an increase of \$111,347 to a previously approved \$15,564,332 Fund F loan for the Regional Water Treatment Plant and System Improvements Project. The increase will fund necessary changes to create redundancy at the new water treatment plant and will complete the project.

The original project description is below:

The project will construct a new raw water intake on the Cumberland River, a 600,000 gallon water storage tank, one pump station, transmission lines, and a two million gallon per day water treatment plant. Plans and specifications for the water treatment plant are substantially complete and were grant funded as a component of other water system improvements projects. The final plant design will permit a one million gallon per day expansion if demand increases. The District has secured a water withdrawal permit through the Division of Water (DOW) and the Army Corps of Engineers. The project ranked second out of sixty-seven projects by the DOW for the 2015 funding cycle and has consistently ranked high in previous funding cycles.

The District purchases about 275 million gallons of water per year from the City of Tompkinsville (“City”) to support 3,400 customers and is subject to Public Service Commission jurisdiction. The City sources water from Mill Creek Lake and has frequently been unable to provide required water demand during peak or drought periods. Additionally, the City has been subject to periodic Notices of Violation (NOV) from the Division of Water. Upgrades to the City’s water treatment plant would not remedy the ongoing supply constraint. The District has made numerous attempts over several years to partner with the City on a regional solution to jointly address these issues but has been unsuccessful.

The District also serves residents of the City of Gamaliel and provides an emergency connection to the Fountain Run Water District #1.

II. PROJECT BUDGET

	<u>Total</u>
Administrative Expenses	\$ 30,930
Legal Expenses	40,895
Land, Easements	148,244
Engineering Fees – Construction	157,187
Engineering Fees - Inspection	244,400
Engineering Fees - Other	5,921
Construction	15,238,130
Other	208,335
Total	\$ 16,074,041

III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund F Loan	\$ 15,675,679	97.5%
HB 235 8N-2014	320,096	2.0%
HB 235 6N-2014	78,266	0.5%
Total	\$ 16,074,041	100%

IV. KIA DEBT SERVICE

Construction Loan	\$15,675,679
Less: Principal Forgiveness	2,904,091
Amortized Loan Amount	\$12,771,588
Interest Rate	0.75%
Loan Term (Years)	30
Estimated Annual Debt Service	\$ 476,202
Administrative Fee (0.25%)	31,929
Total Estimated Annual Debt Service	\$ 508,131

V. PROJECT SCHEDULE

Bid Opening	September 2015
Construction Start	July 2016
Construction Stop	October 2018

VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

A) Customers

Customers	Total
Residential	3,297
Commercial	173
Total	3,470

B) Rates

	Current	Prior	Prior
Date of Last Rate Increase	10/01/17	03/01/14	12/01/12
Minimum (2,000 gallons)	\$22.15	\$17.95	\$17.15
Next 3,000 Gallons	9.28	7.30	6.90
Next 5,000 Gallons	8.00	6.10	5.70
Over 10,000 Gallons	7.03	5.20	4.80
Cost for 4,000 gallons	\$40.71	\$32.55	\$30.95
Increase %	25.1%	5.2%	
Affordability Index (Rate/MHI)	1.6%		

The City has increased wholesale rates to the District by 96% from \$1.53 per 1,000 gallons in January 2011 to \$3.00 per 1,000 gallons as of September 2017.

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 7,951 with a Median Household Income (MHI) of \$31,056. The median household income for the Commonwealth is \$43,740. This increase will bear the same interest rate as the original loan, 0.75%.

Year	Population				Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	4,366		12,353		June 2005	6.0%
1990	2,861	-34.5%	11,401	-7.7%	June 2010	10.7%
2000	2,660	-7.0%	11,756	3.1%	June 2015	4.4%
2010	2,402	-9.7%	10,963	-6.7%	June 2017	4.4%
Current	2,088	-13.1%	10,692	-2.5%		
Cumulative %		-52.2%		-13.4%		

VIII. 2014 CAPITALIZATION GRANT EQUIVALENCIES

- 1) Green Project Reserve - The Drinking Water capitalization grant does not contain a "green" requirement.
- 2) Additional Subsidization – This project qualifies for additional subsidization not to exceed \$2,904,091.

IX. FINANCIAL ANALYSIS (See Exhibit 1)

Financial information was obtained from the audited financial statements for the years ended December 31, 2012 through 2017. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

HISTORY

Revenues increased 32% from \$1.4 million in 2012 to \$1.9 million in 2017. The increase is a result of volume growth and rate increases. Operating expenses increased 66% from \$1.0 million to \$1.7 million. Approximately \$300,000 of the increase is due to the purchased water rate adjustment. The debt coverage ratio was 2.0, 2.4, 1.8, 1.7, 1.7, and 0.7 for each of the respective years.

The 2017 balance sheet reflects a current ratio of 1.2, a debt to equity ratio of 1.2, the number of months of operating expenses in unrestricted cash is 8.1, and the number of days sales in accounts receivable is 48.7.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues will be flat for growth.
- 2) Due to a previously approved rate increase, the District's revenues will increase 18.8% from FY2018 to FY2019. Rate will remain flat afterwards.
- 3) Expenses will increase 2% annually for inflation.
- 4) Incremental operating expenses of \$341,000 per year will be offset by a reduction in purchased water cost of \$706,000.
- 5) Debt service coverage is 1.3 in FY2020 which is the first full year of principal and interest repayments.

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

REPLACEMENT RESERVE

The annual replacement cost is \$50,000. This amount should be added to the replacement account each December 1 until the balance reaches \$500,000 and maintained for the life of the loan.

X. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
Series 1999 Bonds (RD)	\$ 206,500	2038
Series 2017 Bonds (KACo)	2,170,000	2043
KIA Loan F15-002 (i/a/o \$15,564,322)**	<u>10,329,470</u>	
Total	\$ 12,575,970	

**This is the loan for this project. The outstanding balance reflects the amount received by the District as of December 31, 2017.

XI. OTHER STATE OR FEDERAL FUNDING IN PAST FIVE YEARS

<u>Project Title</u>	<u>Funding Source</u>	<u>Amount</u>	<u>Type</u>
Treatment Plant Upgrade	HB235	398,362	Grant

XII. CONTACTS

Legal Applicant	
Name	Monroe County Water District
Address	205 Capp Harlan Road Tompkinsville, KY 42167
County	Monroe
Authorized Official	Richard O. Ross, General Manager
Phone	(270) 487-8131
Email	mcwdr@scrtc.com

Project Administrator	
Name	Monroe County Water District
Address	205 Capp Harlan Road Tompkinsville, KY 42167
Contact	Jana Dubree, Office Manager
Phone	(270) 487-8131
Email	mcwdjd@scrtc.com

Consulting Engineer

Name	Robert Stigall, P.E.
Firm	Stigall Engineering Associates, Inc
Address	4117 Hillsboro Pike, Suite 206 Nashville, TN 37215-2728
Phone	(615) 460-7515
Email	rstigall@bellsouth.net

XIII. RECOMMENDATIONS

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

**MONROE COUNTY WATER DISTRICT
FINANCIAL SUMMARY (DECEMBER YEAR END)**

	Audited	Audited	Audited	Audited	Projected	Projected	Projected	Projected	Projected
	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Balance Sheet									
Assets									
Current Assets	1,339,137	1,504,305	1,550,643	1,590,450	2,143,753	2,665,235	2,908,905	3,123,868	3,309,839
Other Assets	9,935,859	10,404,606	17,408,164	25,051,378	29,118,045	29,039,479	28,369,923	27,700,367	27,030,811
Total	11,274,996	11,908,911	18,958,807	26,641,828	31,261,798	31,704,713	31,278,827	30,824,234	30,340,649
Liabilities & Equity									
Current Liabilities	181,649	498,509	1,334,857	1,307,247	1,307,222	1,307,222	1,307,222	1,307,222	1,307,222
Long Term Liabilities	2,723,363	2,628,044	6,999,886	12,605,304	16,539,357	17,180,347	17,180,347	17,180,347	17,180,347
Total Liabilities	2,905,012	3,126,553	8,334,743	13,912,551	17,846,579	18,487,569	18,487,569	18,487,569	18,487,569
Net Assets	8,369,984	8,782,358	10,624,064	12,729,277	13,415,219	13,217,145	12,791,259	12,336,666	11,853,081
Cash Flow									
Revenues	1,631,274	1,681,350	1,804,897	1,919,473	2,267,514	2,267,514	2,267,514	2,267,514	2,267,514
Operating Expenses	1,249,209	1,312,736	1,441,692	1,703,734	1,652,687	1,306,555	1,332,686	1,359,339	1,386,526
Other Income	7,781	7,839	8,165	9,037	9,037	9,037	9,037	9,037	9,037
Cash Flow Before Debt Service	389,846	376,453	371,370	224,776	623,864	969,996	943,865	917,212	890,025
Debt Service									
Existing Debt Service	217,144	216,146	217,415	310,984	45,000	448,515	700,195	702,249	704,054
Proposed KIA Loan	0	0	0	0	0	0	0	0	0
Total Debt Service	217,144	216,146	217,415	310,984	45,000	448,515	700,195	702,249	704,054
Cash Flow After Debt Service	172,702	160,307	153,955	(86,208)	578,864	521,482	243,670	214,963	185,971
Ratios									
Current Ratio	7.4	3.0	1.2	1.2	1.6	2.0	2.2	2.4	2.5
Debt to Equity	0.3	0.4	0.8	1.1	1.3	1.4	1.4	1.5	1.6
Days Sales in Accounts Receivable	33.6	43.6	45.8	48.7	48.7	48.7	48.7	48.7	48.7
Months Operating Expenses in Unrestricted Cash	10.4	8.7	10.0	8.1	12.5	28.0	30.4	32.4	33.9
Debt Coverage Ratio	1.8	1.7	1.7	0.7	13.9	2.2	1.3	1.3	1.3

EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND F, FEDERALLY ASSISTED DRINKING WATER REVOLVING LOAN FUND		Reviewer Date KIA Loan Number WRIS Number	KIA Staff May 8, 2018 F18-002 WX21153013	
BORROWER		CITY OF SALYERSVILLE MAGOFFIN COUNTY		
BRIEF DESCRIPTION This loan will fund the construction of a 500,000 gallon water storage tank to replace an aging 200,000 gallon water storage tank. A hydrology model was conducted and determined that the new tank will be located in the same place as the old one. KIA previously funded the planning and design of this project with loan F16-038.				
PROJECT FINANCING		PROJECT BUDGET		
Fund F Loan	\$655,982	Administrative Expenses	\$12,500	
Planning & Design Loan (F16-038)	50,000	Planning	19,872	
		Eng - Design / Const	9.8% 7.2% 41,410	
		Eng - Insp	6.9% 6.9% 39,772	
		Eng - Other	16,683	
		Construction	548,325	
		Contingency	27,420	
TOTAL	\$705,982	TOTAL	\$705,982	
REPAYMENT	Rate Term	0.50% 20 Years	Est. Annual Payment 1st Payment 6 Mo. after first draw \$13,568	
PROFESSIONAL SERVICES	Engineer Bond Counsel	Summit Engineering, Inc. Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening Construction Start Construction Stop	Feb-18 May-18 Oct-18		
DEBT PER CUSTOMER	Existing Proposed	\$1,675 \$1,387		
OTHER DEBT	See Attached			
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached			
RESIDENTIAL RATES	Current Additional	Users 1,009 0	Avg. Bill \$21.64 (for 4,000 gallons) \$21.64 (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 2014	21,940	191,850	(169,910)	0.1
Audited 2015	120,096	191,850	(71,754)	0.6
Audited 2016	128,924	184,904	(55,980)	0.7
Audited 2017	215,068	248,621	(33,553)	0.9
Projected 2018	225,775	251,030	(25,255)	0.9
Projected 2019	303,336	272,952	30,384	1.1
Projected 2020	306,222	272,932	33,290	1.1
Projected 2021	278,566	246,319	32,247	1.1
Projected 2022	270,357	242,706	27,651	1.1

Reviewer: KIA Staff
 Date: May 8, 2018
 Loan Number: F18-002

**KENTUCKY INFRASTRUCTURE AUTHORITY
 DRINKING WATER STATE REVOLVING FUND (FUND F)
 CITY OF SALYERSVILLE, MAGOFFIN COUNTY
 PROJECT REVIEW
 WX21153013**

I. PROJECT DESCRIPTION

The City of Salyersville f/b/o Salyersville Water Works is requesting a Fund F loan in the amount of \$655,982 for the Church Street Storage Tank project. This is the construction portion of a prior Planning and Design loan funded by KIA during the Fiscal 2016 funding cycle. This project will construct a 500,000 gallon water storage tank to replace an aging 200,000 gallon tank. The tank is being replaced due to insufficient capacity, issues with leaking, and the need for a higher tank elevation. The tank has been out of service for approximately one year and is around fifty years old.

Salyersville Water Works provides service to approximately 1,000 customers in Magoffin County and sells about 200 million gallons of water annually to the Magoffin County Water District at a cost of \$2.73 per thousand gallons.

II. PROJECT BUDGET

	<u>Total</u>
Administrative Expenses	\$ 12,500
Planning	19,872
Engineering Fees - Design	30,128
Engineering Fees - Construction	11,282
Engineering Fees - Inspection	39,772
Engineering Fees - Other	16,683
Construction	548,325
Contingency	27,420
Total	\$ 705,982

III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund F Loan	\$ 655,982	93%
KIA P&D Loan (F16-038)	50,000	7%
Total	\$ 705,982	100%

IV. KIA DEBT SERVICE

Construction Loan + P&D Loan	\$	705,982
Less: Principal Forgiveness		352,991
Amortized Loan Amount	\$	352,991
Interest Rate		0.50%
Loan Term (Years)		30
Estimated Annual Debt Service	\$	12,686
Administrative Fee (0.25%)		882
Total Estimated Annual Debt Service	\$	13,568
Total Estimated Monthly Payments	\$	1,130

V. PROJECT SCHEDULE

Bid Opening	February 2018
Construction Start	May 2018
Construction Stop	October 2018

VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

A) Customers

Customers	Current
Residential	895
Commercial	114
Total	1,009

B) Rates

Water	Inside City		Outside City	
	Current	Prior	Current	Prior
Date of Last Rate Increase	01/22/18	06/27/17	01/22/18	06/27/17
Minimum (First 2,000 Gallons)	\$12.97	\$12.60	\$17.09	\$16.60
Next 1,000 Gallons	4.03	3.92	4.86	4.72
Over 2,000 Gallons (per 1,000)	4.64	4.51	5.48	5.33
Cost for 4,000 gallons	\$21.64	\$21.03	\$27.43	\$26.65
Increase %	2.9%		2.9%	
Affordability Index (Rate/MHI)	1.1%		1.4%	

Sewer	Inside City		Outside City	
	Current	Prior	Current	Prior
Date of Last Rate Increase	01/22/18	06/27/17	01/22/18	06/27/17
Minimum (First 2,000 Gallons)	\$17.12	\$16.63	\$21.48	\$20.86
Next 1,000 Gallons	4.07	3.96	4.91	4.77
Over 2,000 Gallons (per 1,000)	4.69	4.56	5.54	5.38
Cost for 4,000 gallons	\$25.88	\$25.15	\$31.93	\$31.01
Increase %	2.9%		3.0%	
Affordability Index (Rate/MHI)	1.3%		1.6%	

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 2,227 with a Median Household Income (MHI) of \$23,544. The median household income for the Commonwealth is \$43,740. The project will qualify for a 0.50% interest rate based on MHI.

Year	Population		County		County Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	1,352		13,515		June 2005	11.7%
1990	1,917	41.8%	13,077	-3.2%	June 2010	20.4%
2000	1,604	-16.3%	13,332	1.9%	June 2015	14.5%
2010	1,883	17.4%	13,333	0.0%	June 2017	18.0%
Current	1,921	2.0%	12,887	-3.3%		
Cumulative %		42.1%		-4.6%		

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 qualifies for additional subsidization of 50%, not to exceed \$352,991.

IX. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for Salyersville Water Works (the Utility) for the years ended June 30, 2014 through June 30, 2017. The Utility is comprised of both water and sewer operations which are combined in the Financials Presentation. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2016 and 2017 operating expenses from which the forecast is based. Percentage

references in the History section below are based on whole dollar amounts and not the rounded amounts presented. A significant amount of the Utility's financial information was lost during the March 2, 2012 tornado.

FINANCIAL REPORTING AND COMPLIANCE

1. The Utility has had consistent audit findings about underfunding of a reserve requirement on KIA loan A02-08. The original loan amount was \$2,035,486 with a reserve requirement of \$529,290, or 26% of the loan. The reserve was calculated under a methodology that is no longer used by KIA. KIA has agreed to revise the requirement to the amount that would be required based on current reserve methods.
2. KIA loan A02-08 was restructured in 2010 to require monthly payments via ACH. This was the result of prior non-payment issues.
3. Audited financial statements were not provided to KIA from 2008 – 2014.
4. Audited performance for 2015 in this credit analysis has been adjusted for a \$95,000 (6%) overstatement of revenues due to a financial statement error. This error was not identified when the Board approved KIA loans A16-077 and F16-038 totaling \$665,230 on April 7, 2016.
5. Five of the seven beginning balances for long term debt line items from the 2017 audit were restated from the 2016 audit, however, the offset could not be identified as there was no restatement of retained earnings or identification of the restatement in the footnotes.
6. The original Planning and Design loan for this project came with loan conditions to increase rates 3% on a yearly basis. Although the Utility passed meeting minutes (dated April 5, 2016) stating they would change rates effective January 1, 2017 and each January thereafter, the January 2017 increase did not occur. The Utility has since adjusted rates on June 27, 2017 and January 22, 2018.

HISTORY

Revenues increased 11% from \$1.3 million in 2014 to \$1.5 million in 2017. Wholesale water revenues (34% of 2014 revenues) declined 7% or \$36,000 during the same period. Operating expenses averaged \$1.3 million each year with no significant year to year variation. Cash flow after debt service was (\$169,910), (\$71,754), (\$55,980), and (\$33,553) for 2014 through 2017, respectively.

The balance sheet reflects a current ratio of 0.4, a debt to equity ratio of 0.6, 33.8 days sales in accounts receivable. The utility had a cash deficit of \$8,400. We do not have sufficient information to determine the extent to which accounts payable balances were more than thirty days in arrears at the end of fiscal 2017.

Given the Utility's financial condition, they do not have the capacity to absorb inflation

cost increases, unanticipated expenses, or the effect of increases in pension contribution rates beginning in fiscal 2019.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues will increase slightly in 2018 and 2019 due to previously implemented rate increases. Revenues will remain flat thereafter.
- 2) The Utility requires an immediate annual revenue increase of approximately \$145,000 (approximately 14% of non-wholesale revenues) beginning in fiscal 2019 to offset existing and predicted negative cash flow, decrease inflationary expense sensitivity, and to mitigate some balance sheet weaknesses. The effect on the affordability index for each rate is as follows:

Rate	Current	Projected
City Water	1.1%	1.3%
City Sewer	1.3%	1.5%
Out of City Water	1.4%	1.6%
Out of City Sewer	1.6%	1.9%

- 3) Expenses will increase 2% annually for inflation.
- 4) Pension expense will increase by \$12,000 beginning in fiscal 2019 as a result of contribution rate changes made during the 2018 Legislative Session.
- 5) The Utility will discontinue the grinder pump project (A16-077), which was originally approved for \$615,230, at the end of current commitments resulting in a final loan amount of approximately \$362,000.
- 6) Debt service coverage is 1.1 in 2019 when full principal and interest repayments begin for the Planning & Design loan (F16-038).

REPLACEMENT RESERVE

The annual replacement cost is 5% (\$36,000) of the final amount borrowed (prior to principal forgiveness, if any) to be funded in monthly installments (\$142) over 20 years and maintained for the life of the loan.

X. DEBT OBLIGATIONS

	Outstanding	Maturity
USRD Bonds	\$ 110,000	2023
USRD Bonds	248,000	2029
USRD Bonds	31,000	2029
KIA (A02-08)	916,279	2024
Magoffin County Fiscal Court (Loan to catch up A/P)	50,000	On Demand
Ford Motor Credit – Capital Lease	16,508	2019
Salyersville National Bank Note	84,401	2019
Ford Motor Credit – Capital Lease	21,699	2019

	Outstanding	Maturity
KIA (F16-038, i/a/o \$50,000)	34,615	TBD
KIA (A16-077, i/a/o \$615,230)	233,865	TBD
Total	\$ 1,746,367	

XI. CONTACTS

Legal Applicant	
Name	City of Salyersville
Address	P.O. Box 640 Salyersville, KY 41465
County	Magoffin
Authorized Official	Mayor James Pete Shepherd
Phone	(606)-349-2409
Email	Jamesm.shepherd@ky.gov

Project Administrator	
Name	Big Sandy ADD
Address	110 Resource Court Prestonsburg, KY 41653
Contact	Denise Thomas
Phone	(606) 886-2374
Email	Denise.thomas@bigsandy.org

Consulting Engineer	
Name	Matt Jolly
Firm	Summit Engineering, Inc.
Address	131 Summit Drive Pikeville, KY 41501
Phone	(859) 264-9860
Email	mjolly@summit-engr.com

XII. RECOMMENDATIONS

KIA staff does not recommend approval of the loan due to the Utility's current financial condition and its extensive history of financial reporting issues and failure to comply with terms of existing loans.

Staff recommends the following:

- 1) The Utility will implement a mandatory CPI resolution for retail rates which will be effective each July 1 beginning in 2018 based on the twelve months ended December of each prior calendar year. They will be required to provide documentation of this annual adjustment when requested.

- 2) Rates will be adjusted effective no later than December 31, 2018 to increase annual non-wholesale revenues by \$145,000 (approximately 14% of non-wholesale revenues).
- 3) The Utility will initiate wholesale rate adjustments with the PSC at least every two years beginning in January 2019 (subsequent to the December 31, 2017 due date for completion of the 2018 audit).
- 4) Principal repayment of the existing KIA Planning and Design Loan (F16-038) will be deferred until December 1, 2019 should the project not move forward. KIA will consider a new application for the project upon receipt of the audited financial statements for the year ended June 30, 2019 (due to KIA by December 31, 2019) and demonstration of credit worthiness based on loan policies that are in effect at that time.

Board Recommendations:

The Board made the decision on May 8, 2018 to conditionally approve the loan. The Board replaced Staff Recommendation #2 above with the following:

- 1) The Utility will increase annual non-wholesale revenues by \$140,000 (approximately 14% of non-wholesale revenues) through a combination of retail and/or wholesale revenues. Rates will be adjusted at least 6% annually until the city reaches a 1.1 debt coverage ratio. This must be accomplished within a three year time frame. The Utility must present KIA with a resolution of the Commission that lays out these conditions.

CITY OF SALYERSVILLE
FINANCIAL SUMMARY (JUNE YEAR END)

	<u>Audited</u> <u>2014</u>	<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>
Balance Sheet									
Assets									
Current Assets	199,119	175,004	149,593	155,251	155,421	172,598	182,056	188,505	195,935
Other Assets	6,978,508	6,771,594	6,672,402	6,898,485	6,791,944	6,845,846	6,549,082	6,251,484	5,950,209
Total	7,177,627	6,946,598	6,821,995	7,053,736	6,947,365	7,018,444	6,731,138	6,439,989	6,146,144
Liabilities & Equity									
Current Liabilities	336,420	328,982	327,475	400,033	409,486	408,943	388,506	390,926	394,726
Long Term Liabilities	1,672,424	1,985,155	1,984,806	2,159,629	1,783,450	1,720,492	1,680,670	1,464,633	1,247,596
Total Liabilities	2,008,844	2,314,137	2,312,281	2,559,662	2,192,936	2,129,435	2,069,176	1,855,559	1,642,322
Net Assets	5,168,783	4,632,461	4,509,714	4,494,074	4,754,429	4,889,010	4,661,962	4,584,430	4,503,822
Cash Flow									
Revenues*	1,353,356	1,446,427	1,443,674	1,503,843	1,559,972	1,679,415	1,709,415	1,709,415	1,729,415
Operating Expenses	1,331,428	1,326,346	1,314,760	1,303,046	1,334,207	1,376,089	1,403,203	1,430,859	1,459,068
Other Income	12	15	10	14,271	10	10	10	10	10
Cash Flow Before Debt Service	21,940	120,096	128,924	215,068	225,775	303,336	306,222	278,566	270,357
Debt Service									
Existing Debt Service	191,850	191,850	184,904	248,621	251,030	266,168	259,364	232,751	229,138
Proposed KIA Loan	0	0	0	0	0	6,784	13,568	13,568	13,568
Total Debt Service	191,850	191,850	184,904	248,621	251,030	272,952	272,932	246,319	242,706
Cash Flow After Debt Service	(169,910)	(71,754)	(55,980)	(33,553)	(25,255)	30,384	33,290	32,247	27,651
Ratios									
Current Ratio	0.6	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.5
Debt to Equity	0.4	0.5	0.5	0.6	0.5	0.4	0.4	0.4	0.4
Days Sales in Accounts Receivable	43.2	35.0	31.1	33.8	33.8	33.8	33.8	33.8	33.9
Months Operating Expenses in Unrestricted Cash	0.2	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.2
Debt Coverage Ratio	0.1	0.6	0.7	0.9	0.9	1.1	1.1	1.1	1.1

* Revenue was adjusted down \$95,000 in FY2015 due to an accounting error discovered during the credit analysis.