

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC INVESTIGATION INTO)
EXCESSIVE WATER LOSS BY KENTUCKY’S) CASE NO. 2019-00041
JURISDICTIONAL WATER UTILITIES)

ESTILL COUNTY WATER DISTRICT NO. 1’S STATUS REPORT
ON COMPLIANCE WITH ORDER OF NOVEMBER 22, 2019

Pursuant to the Commission’s Order of April 7, 2020, Estill County Water District No. 1 (“Estill District”) submits the following report on the status of its efforts to comply with the Order of November 22, 2019

Compliance with 807 KAR 5:066, Section 16(1). Estill District has elected to replace all existing meters rather than test meters that been in service for more than ten years since their last accuracy test. On December 5, 2019, the Kentucky Infrastructure Authority’s (“KIA”) Board of Directors conditionally committed to loan Estill District up to \$2,399,450 to fund Estill District’s System Improvement and Meter Replacement Project. This Project includes the replacement of all existing customer meters, the installation of flow metering and backflow prevention devices, the development of a hydraulic model of Estill District’s system, and the replacement or relocation of five substandard existing creek crossings. The minutes of December 5, 2019 KIA Board meeting and the Project’s Profile are attached. Estill District has since been advised that the Appalachian Regional Commission (“ARC”) intends to award a grant of \$500,000 for the project. It anticipates a formal award of the ARC grant in the next few months. Estill District expects to request bids on the purchase and installation of metering equipment, and to apply to the Commission for a

Certificate of Public Convenience and Necessity and for authorization to execute an Assistance Agreement with KIA by late summer.

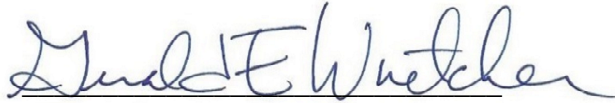
Fire Department Water Usage. On October 17, 2019, Estill District submitted a revised tariff the expressly addressed the provision of free water service to fire departments for firefighting training and fire protection services and included a reporting form that all fire departments were to complete monthly. The revised tariff took effect on November 17, 2019. The General Manager has contacted both fire departments within Estill District's territory and explained the importance of making monthly reports. Free water service to both fire departments is metered at the fire stations, but the fire departments may still access non-metered water through fire hydrants. (Free metered service extends only to a facility that allows the fire departments to fill their tankers. It does not include water service for uses inside the fire houses.) Estill District has just initiated a process by which it will contact fire departments by telephone or e-mail each month to confirm non-metered usage and will report total fire department usage on its monthly water loss reports. It expects to revise its tariff within the next 30 days to reflect this new procedure.

Development of Written Procedures and Policies. In its Order of November 22, 2019, the Commission directed Estill to develop written procedures and policies for water line breaks due to third party excavators, a policies and procedures manual, a safety training manual and schedule; and a policy on theft of water service. Estill District is still in the process of preparing these documents. The Kentucky Rural Community Assistance Program has agreed to assist in these efforts. These efforts, however, have been delayed due to the state of emergency caused by the COVID-19 pandemic. Estill District plans a major push in the next three months to develop these polices and to submit them to the Commission in a timely manner.

Water Audit. In its Order of November 22, 2019, the Commission directed Estill District to “provide the results of a comprehensive water audit.” The Kentucky Water Resource Research Institute (“KWRRRI”) has agreed to conduct this audit. Work on the audit is expected to begin in late May 2020. The KWRRRI will be conducting the water audit in accordance with the procedures set forth in the American Water Works Association’s M36 Manual.

Dated: May 21, 2020

Respectfully submitted,




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Counsel for Estill County Water District No. 1

CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8, I certify that Estill County Water District No. 1’s electronic filing of this Report is a true and accurate copy of the same document being filed in paper medium; that the electronic filing was transmitted to the Public Service Commission on May 21, 2020; that there are currently no parties that the Public Service Commission has excused from participation by electronic means in this proceeding; and within 30 days following the end of the state of emergency announced in Executive Order 2020-215 this Report in paper medium will be delivered to the Public Service Commission.



Counsel for Estill County Water District No. 1

KENTUCKY INFRASTRUCTURE AUTHORITY
Minutes of the Full Board

Meeting Date/Location: **December 5, 2019 – 1:00 p.m.**
 Kentucky Infrastructure Authority
 100 Airport Road, Third Floor, Frankfort

Members present:

Commissioner Sandra K. Dunahoo), Department for Local Government
Mr. Bruce Scott, (proxy for Secretary Charles Snavelly), Energy and Environment Cabinet
Mr. Claude Christensen, representing Kentucky League of Cities
Mr. Ron Lovan, Representing the Kentucky Section of the American Water Works Association
Mr. Jeb Pinney (proxy for Gwen Pinson, Executive Director), Public Service Commission
Mr. Bobby Aldridge (proxy for Interim Secretary Vivek Sarin), Cabinet for Economic Development
Mr. Russell Rose, representing Kentucky Rural Water Association
Mr. Kurt Stafford, representing the For-Profit Water Companies
Mr. David A. Voegelé, representing Kentucky Association of Counties

Members absent:

Secretary William Landrum), Finance and Administration Cabinet
Mr. Robert A. Amato, representing Kentucky Municipal Utilities Association

DLG Staff:

Ms. Suzanne Molley, Staff Attorney

KIA Staff:

Ms. Donna McNeil, Executive Director
Ms. Linda Bridwell, Deputy Executive Director
Ms. Ashley Adams, Financial Analyst
Mr. Jeff Abshire, Fiscal Officer and KIA Treasurer
Ms. Julie Bickers, Regional Compliance Coordinator
Mr. Kelly Cunnagin, Executive Staff Advisor
Ms. Kristie Dodge, Buffalo Trace Area Development District
Mr. Dustin Horn, WRIS Geoprocessing Specialist
Ms. Debbie Landrum, Regional Compliance Coordinator
Ms. Meg Link, Administrative Specialist III and KIA Secretary
Ms. Sarah Parsley, Regional Compliance Coordinator
Mr. Don Schierer, WRIS Resource Management Analyst
Ms. Meili Sun, Financial Analyst

Guests:

Mr. Jim Adams, Lincoln County Judge Executive
Mr. Ray Bascom, HMB Engineers
Mr. Luther Galloway, AGE Engineers
Mr. Tony Claunch, City of Somerset
Ms. Bethany Couch, Office of Financial Management
Mr. Kelly Gillespie, Bell Engineers
Mr. Steve Judy, Judy Construction Company
Mr. Patrick Kirby, CEDA, Inc.
Mr. Herb LeMaster, Tetra Tech
Ms. Karyn Leverenz, Bluegrass Area Development District

Mr. Ora Main, Nesbitt Engineering, Inc.
Mr. Greg Mains, Augusta Regional Sewer Authority
Mr. Charlie Martin, Lexington-Fayette Urban County Government
Ms. Audra Miller, Estill County Water District
Mr. Russell Neal, Division of Water
Mr. Paul Nesbitt, Nesbitt Engineering, Inc.
Mr. Bill Payne, Lincoln County Sanitation District
Mr. Bob Peterson, Lexington-Fayette Urban County Government
Mr. James Rowe, Northern Madison County Sanitation District
Mr. Chris Stewart, HMB Engineers
Mr. Jack Stickney, Estill County Water District
Mr. Elliott Turner, Northern Madison County Sanitation District
Ms. Julia Wang, Legislative Research Commission
Ms. Dana Whitis, City of Somerset

PROCEEDINGS

Commissioner Sandra K. Dunahoo, Chair, called the meeting of the Kentucky Infrastructure Authority (KIA) Board to order. She asked Suzanne Molley, DLG Staff Attorney, to confirm the press notification distribution as well as the presence of a quorum. Guests were asked to introduce themselves.

I. BUSINESS (Board Action Required)

A. 1. APPROVAL OF MINUTES

For: KIA Regular Board Meeting of November 7, 2019

Mr. Ron Lovan moved to approve the minutes of the November 7, 2019, regular board meeting. Mr. Russ Rose seconded, and the motion carried unanimously.

2. AWARDS PRESENTATION

Director Donna McNeil explained that USEPA has a program called Performance and Innovation in the SRF Creating Environmental Success (PISCES) program. It allows assistance recipients to gain national recognition for exceptional projects funded by the CWSRF. Participating state programs each nominated one project that demonstrates one or more of the evaluation criteria: water quality, public health, or economic benefits; sustainability; or Innovation

In 2018 there were 5 Nationally Recognized Projects and 11 Honorable Mention projects. KIA nominated the Lincoln County Sanitation District, which was recognized as a 2018 USEPA PISCES Honorable Mention recipient for the Junction City to Hustonville Sewer project. The project provided a sanitary sewage system to serve 535 residential customers and 50 commercial customers which had no sanitary sewer system. The project eliminated approximately 220 failing septic tanks, 100 raw sewage discharges, and 2 package treatment plants. An inadequate sewage package treatment plant was eliminated at the Hustonville Elementary School. The school was not able to operate its dishwasher because the package plant could not handle the load in addition to the rest rooms. Meals were served on Styrofoam trays with plastic utensils at a large cost to the school district.

The \$7.92 million project was funded by a KIA, US Rural Development, Community Development Block Grant, Appalachian Regional Commission, and local funds. Director McNeil presented representatives from the Lincoln County Sanitation District a certificate for their 2018 USEPA Pisces Award Honorable Mention to Chairman Bill Payne, Lincoln County Judge Executive Jim Adams, and Luther Galloway, AGE Engineering.

For the 2019 PISCES Recognition Program, at least one project was selected in each EPA Region resulting in 13 projects receiving Exceptional Project recognition. 17 states received Honorable Mention Recognition.

KIA's nomination received recognition again this year. The Lexington-Fayette Urban County Government was recognized as a 2019 USEPA PISCES Honorable Mention recipient from Region 4 for the West Hickman WWTP Wet Weather Storage and Head Works project.

The \$63.4 million project included construction a new mechanical screening and grit removal system, a facility odor control system, two non-potable water pumping stations, auxiliary power to operate the entire complex, a 20 million gallon above ground storage tank, and a 140 million gallon a day (MGD) pump station that allowed for the elimination of two smaller pump stations. The project provides future public sewer capacity in an area expected to see expansive development. Construction of these enhancements provides the City with the appropriate sewer capacity and eliminates the need for future private septic systems and additional wastewater treatment plants.

Director McNeil also presented a certificate for the 2019 USEPA Pisces Award Honorable Mention to representatives Bob Peterson and Charles Martin from the Lexington-Fayette Urban County Government; the project design lead Herb LeMaster representing Tetra Tech; and the prime contractor, Steve Judy, from Judy Construction Company.

B. NEW PROJECTS/ACTION ITEMS

1. A RESOLUTION AND ORDER OF THE BOARD OF DIRECTORS OF THE KENTUCKY INFRASTRUCTURE AUTHORITY AUTHORIZING AN AMENDMENT TO THE CONDITIONAL COMMITMENT FOR A FEDERALLY ASSISTED CLEAN WATER REVOLVING FUND A LOAN (A17-001) INCREASE FOR AN AMOUNT UP TO \$7,397,000 TO THE AUGUSTA REGIONAL SEWER AUTHORITY, BRACKEN COUNTY, KENTUCKY

Mr. Russell Neal, DOW, Ms. Ashley Adams, KIA, and Mr. Greg Mains, representing the Augusta Regional Sewer Authority (ARSA), discussed ARSA's request for a Fund A loan increase in the amount of \$1,100,000 for the Augusta/Brooksville Regional Sewer project. The original loan was approved by the KIA board in October 2017 in the amount of \$5,697,000 which will bring the new loan total to \$6,797,000. The reason for the increase is due to bids coming in higher than originally estimated. Specifically, the overage was due to an increase in pump pricing from the time of the engineer estimate until bidding occurred. Rejecting and rebidding this portion of the project is highly unlikely to produce a different outcome.

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. 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 2 commercial and industrial customers in Bracken County. At the time of the original project KIA extended \$1.3 million in principal forgiveness to help facilitate the project and was the first funding agency committed. Since then, USDA Rural Development has committed funds to the project in the form of a \$3.2 million loan and a \$2.8 million grant combination.

Mr. Bruce Scott thanks the ARSA staff for the continued work they have done, he noted it was not an easy thing to do, but the right thing to do for the betterment of the communities and Commissioner Dunahoo also mentioned Kristie Dodge and her assistance.

Mr. Greg Mains thanked KIA for their support through the long process of getting to this point.

Mr. Bruce Scott moved to approve the Fund A Loan, (A17-001), increase in an amount up to \$1,100,000 with the standard conditions. Judge David Voegelé seconded and the motion was unanimously approved.

2. A RESOLUTION AND ORDER OF THE BOARD OF DIRECTORS OF THE KENTUCKY INFRASTRUCTURE AUTHORITY AUTHORIZING ISSUANCE OF A CONDITIONAL COMMITMENT FOR A FEDERALLY ASSISTED CLEAN WATER REVOLVING FUND LOAN (A20-003) FOR AN AMOUNT UP TO \$3,406,500 TO THE LINCOLN COUNTY SANITATION DISTRICT, LINCOLN COUNTY, KENTUCKY

Mr. Russell Neal, DOW, Ms. Ashley Adams, KIA and Mr. Bill Payne, representing the Lincoln County Sanitation District, discussed District's request for a Fund A Loan, (A20-003), in an amount up to \$3,018,100 for the construction of the US 127 Corridor Sanitary Sewer project. Prior KIA planning and design loan A19-048 will be rolled into this loan for a total of \$3,406,500. This project is the second phase of a project to bring sanitary sewer to a section of Lincoln County that has seen rapid residential growth over the past few years but remains unserved by sanitary sewer. This second phase will complete service to virtually all subdivisions on the east and west side of US 127 from the Norfolk Southern Railroad, north to KY Hwy 1194 which includes approximately 363 homes both older and recently built.

Lincoln County Sanitation District currently serves approximately 412 customers with more expected to connect in the Phase 1 service area in the future along with the additional 363 Phase 2 customers. The District was established on May 10, 2011 by the Lincoln County Fiscal Court. It is governed by five directors who are appointed by the County Judge Executive and approved by the fiscal court. Connection to the public wastewater system is mandatory within four months of the date that a property owner is notified that service is available. The

District has received national recognition from US EPA for their accomplishments with Phase 1 of this project including an Honorable Mention for the 2018 PISCES award.

Mr. Ron Lovan moved to approve the Fund A Loan (A20-003) in an amount up to \$3, 018,100 with the standard conditions. Mr. Bruce Scott seconded and the motion was unanimously approved.

3. A RESOLUTION AND ORDER OF THE BOARD OF DIRECTORS OF THE KENTUCKY INFRASTRUCTURE AUTHORITY AUTHORIZING ISSUANCE OF A CONDITIONAL COMMITMENT FOR A FEDERALLY ASSISTED CLEAN WATER REVOLVING FUND A LOAN (A20-049) FOR AN AMOUNT UP TO \$730,000 TO THE NORTHERN MADISON COUNTY SANITATION DISTRICT, MADISON COUNTY, KENTUCKY

Mr. Russell Neal, DOW, Ms. Meili Sun, KIA, and Mr. Patrick Kirby, Community & Economic Development Associates, Inc. (CEDA), discussed the Northern Madison County Sanitation District's request for a Fund A loan in the amount of \$730,000 for the Boone Village Wastewater Collection System project.

The project proposes to install approximately 7,701 LF of gravity sewers, thirty-five manholes, two submersible pump stations, and approximately 4,700 LF of 4" diameter force main to collect and transport wastewater from 70 residential customers and 1 commercial establishment to the existing District system. The flow will ultimately be treated at the District's regional wastewater treatment plant. The purpose of this project is to eliminate sewage overflow caused by septic tanks and improve public health.

Upon completion of this project, the District will add 71 new customers to the 1,000 existing customers in Madison County.

Judge David Voegele asked about if there are additional customers coming, does that account for the \$1,200 decrease in debt per customer. Ms. Sun noted the District had been making the annual debt service payment each year. Mr. Paul Nesbitt stepped up and noted the increased customers and the additional debt service payments.

Mr. Ron Lovan asked about the flow from the project eventually going to the regional waste water plant. Will it automatically happen or is there additional work to be done? City officials noted everything was in place to do it automatically

Mr. Kurt Stafford asked about the anticipated 70 new customers that would be added on and if there potentially were more customers. City officials noted that there was a major construction project on Exit 95 and when it was completed, they expected there to be rapid growth, including a new school, and that lines are in place now for future customers.

Mr. Ron Lovan moved to approve the Fund A Loan (A20-049) in an amount up to \$730,000 to the Northern Madison County Sanitation District with the standard conditions. Mr. Bruce Scott seconded and the motion was unanimously approved.

4. A RESOLUTION AND ORDER OF THE BOARD OF DIRECTORS OF THE KENTUCKY INFRASTRUCTURE AUTHORITY AUTHORIZING ISSUANCE OF A CONDITIONAL COMMITMENT FOR A FEDERALLY ASSISTED DRINKING WATER REVOLVING FUND LOAN (F20-013) FOR AN AMOUNT UP TO \$2,399,450 TO THE ESTILL COUNTY WATER DISTRICT, ESTILL COUNTY, KENTUCKY

Mr. Russell Neal, DOW, Ms. Meili Sun, KIA, and Ms. Audrea Miller, representing the Estill County Water District, discussed the District's request for a Fund F loan in the amount of \$2,399,450 for the System Improvement and Meter Replacement project.

This project will implement improvements designed to help reduce unaccounted for water in the system. It will install flow metering and backflow prevention devices, develop a hydraulic model, and relocate or replace five substandard existing creek crossings. The ECWD has taken an active approach to minimizing unaccounted for water loss through pump stations and telemetry upgrades, valve replacements, installation of test meter assemblies within the system, utilization of leak detection services, and purchase of a hydraulic model for the system. The scope of work also includes purchase and installation of new residential meters throughout the service area. On site testing indicates that the current meters are rapidly reaching the end of the useful life and inaccurate in measuring low "trickle" flows. The ECWD is a PSC regulated system serving approximately 3,800 residential and commercial customers in Estill County. All rate changes related to retail and water purchase are subject to PSC approval.

Mr. Bruce Scott asked Mr. Neal what their hope was in reducing their water loss. City officials noted they hoped to get it down from 40% to 15%. PSC requires the District to do a Corrective Action Plan. Mr. Ron Lovan said they are to be commended that it is important to get water losses down. Mr. Lovan asked if they were replacing all residential meters and what were their plans for back flow prevention. It was noted that Estill County receives 90 of their water from IMU and interconnector goes under the Kentucky River and that has been problematic since it was built in the 1960s so they advised them to establish backflow prevention on their side of the river in case of failure at the River crossing. He believes it has already been put in place. Mr. Russ Rose asked if the meter replacements would be done in-house or if it would be contracted out. County officials noted it would be contracted out.

Mr. Bruce Scott moved to approve the Fund F Loan (F20-013) loan in an amount up to \$2,399,450 to the Estill County Water District with the standard conditions. Mr. Ron Lovan seconded and the motion was unanimously approved.

5. A RESOLUTION AND ORDER OF THE BOARD OF DIRECTORS OF THE KENTUCKY INFRASTRUCTURE AUTHORITY AUTHORIZING ISSUANCE OF A CONDITIONAL COMMITMENT FOR A FEDERALLY ASSISTED DRINKING WATER REVOLVING FUND LOAN (F20-019) FOR AN AMOUNT UP TO \$7,027,878 TO THE CITY OF SOMERSET, PULASKI COUNTY, KENTUCKY

Mr. Russell Neal, DOW, Ms. Meili Sun, KIA and Ms. Dana Whitis, representing the City of Somerset, discussed the City's request for a Fund F loan in the amount of \$7,027,878 for the Storage Tank, Booster Stations, and Water Main Extension project, which is consisted of 2 contracts. Contract 1 – Oak Hill Storage Tank Replacement, 5 MG Booster Station, and Water Main Extension will replace an existing one million gallon storage tank with a new one of the same storage capacity. It will also build a new booster pump station with 5 million gallon capacity and SCADA, add Variable Frequency Drives at the water treatment plant, and install an eight inch water main near the Lake Cumberland Regional Hospital to balance pressure in the system. Contract 2 – Valley Oak Industrial Park Water System improvements will construct a 1,000 gallon per minute water booster pumping station to facilitate filling of the Sugar Hill Water Storage Tank, install a new water mixing system in the same tank, reconfigure piping

that feeds the tank, and build a Chlorination Booster Station to improve water quality for the Valley Oak Industrial Park and Southeastern Water Association.

The City is a regional provider currently serving approximately 9,000 retail and 4 wholesale customers in Somerset and the surrounding area. Of the 4 wholesale customers, Southeastern Water Association and Western Pulaski County Water District are PSC regulated systems.

Mr. Kurt Stafford asked about the rates for outside the city and if they were residential customers or wholesale customers.

Mr. Bruce Scott moved to approve the Fund F Loan (F20-019) loan to the City of Somerset in an amount up to \$7,027,878 with the standard conditions. Mr. Russ Rose seconded and the motion carried unanimously.

6. A RESOLUTION OF THE KENTUCKY INFRASTRUCTURE AUTHORITY AUTHORIZING AND APPROVING THE ISSUANCE OF OBLIGATIONS OF THE KENTUCKY INFRASTRUCTURE AUTHORITY TO REIMBURSE CAPITAL EXPENDITURES MADE BY GOVERNMENTAL AGENCIES PURSUANT TO LOANS MADE BY THE KENTUCKY INFRASTRUCTURE AUTHORITY TO SUCH GOVERNMENTAL AGENCIES

This is a routine resolution allowing KIA to reimburse expenses that are paid out of the Authority’s funds with bond proceeds. The projects listed below are covered under this resolution:

BORROWER	FUND	AMOUNT UP TO
Augusta Regional Sewer Authority (Increase)	A17-001	\$1,100,000
Lincoln County Sanitation District (Construction)	A20-003	\$3,018,100
Northern Madison County Sanitation District	A20-049	\$ 730,000
Estill County Water District	F20-013	\$2,399,450
City of Somerset	F20-019	\$7,027,878

Mr. Ron Lovan moved to approve the reimbursement resolution. Mr. Bruce Scott seconded and the motion carried unanimously.

EXECUTIVE DIRECTOR’S REPORT

Director McNeil addressed the group noting the suggested 2020 board dates that had been sent out with the other Board meeting materials. All are suggested for the first or second Thursday, other than the September date that would be the final Thursday to review the audit. Commissioner Dunahoo asked if it would be advisable with the pending transition and several Board positions changing to hold off and finalizing dates at a later date. Mr. Kurt Stafford noted a January date would need to be set. Mr. Ron Lovan asked if they were the standard dates. Director McNeil noted that in years past, the regularly scheduled meetings were the first Thursday of each month. Last year, for quorum purposes, April, May and September were changed for spring and fall break as well as Derby in May. Director McNeil noted, it might be best to confirm January 9th as the next meeting and finalize the other dates at a later time. The By-Laws state the Board would set the dates for the following year at the December Board

meeting. If they are set and then changed, it will become a Special Called meeting. Mr. Ron Lovan suggested the January date be approved and confirmed, but to wait until January to set the additional 2020 meeting dates to avoid conflicts with new Board members' schedules.

Mr. Ron Lovan moved to approve Thursday, January 9th as the next regularly scheduled board Meeting. Mr. Bob Amato seconded and the motion was unanimously approved.

Director McNeil discussed the 2019 USEPA Aquarius recognition program for the Drinking Water State Revolving Fund, which began this year. KIA's nomination was selected to receive this national honor. On December 18th, the City of Danville is scheduled to be presented the USEPA Aquarius Excellence Recognition award for the water treatment plant and intake project. The presentation will be at the water treatment plant at 11:00 EST. Lunch is being served after a short presentation. This drinking water project was the first H2O Award recipient.

There are two other presentations coming in the next few weeks, the 2019 H2O Award recipient City of Fleming-Neon will be receiving their drinking water award on December 11th at the KRADD Board of Directors meeting in Hazard. The Regional Water Resource Agency will receive the 2019 H2O Award for a clean water project on Monday, December 16th at their Board of Directors meeting at 3:30 CST in Owensboro.

Staff attended the CIFA Conference and EPA SRF Workgroup meeting in Cleveland on November 17-20th. Staff presented the KIA dashboards and screens associated with the SRF program, including the loan management process, including project ranking. It was very well received. Director McNeil was elected to the CIFA Board of Directors.

KIA may be the recipient of another grant program, the Sewer Overflow Grant Program (SOG) to benefit SSO elimination. It will be used for sanitary sewer overflow, combined sewer overflows, especially if utility has a consent degree in place and also storm water overflow. This program was authorized in the American Water Infrastructure Act, both the House and Senate have funds set aside in their budget for this Act so EPA thinks we will be getting money. These funds will be allocated based upon the Clean Water SRF allocation formula, with some other things factoring in, including permeability, rainfall and other factors in addition to how the state gets their SRF.

This is also a look at the 2020 Water Resource Development Act and the Water Quality Protection and Job Creation Act both deal with the Clean Water SRF Program, looking at the authorization and reallocating of funds. We were recently told that Congress is looking at an allocation formula to change the way states are allocated funds based upon the Needs Survey, which has not been done in the past. So it will be very important in the next couple of years that the Drinking Water and Clean Water SRF Needs Survey are documented as well as we can to ensure Kentucky gets the most funds possible. Those funds for implementation, administration and possibly set-asides and also to support job creation in the industry for economic development. It unanimously passed the House Transportation Infrastructure Committee in October.

With the Drinking Water program, EPA has announced they will issue a deviation to the federal regulations, allowing water rights to be eligible for the program. Water rights by the standard definition are not a Kentucky or states east of the Mississippi, however USEPA is using a broader definition for the Drinking Water program which will involve storage capacity for existing population, disallowing growth.

KIA has filed their 2020 Budget, our operating expenses are going to be approximately \$3.2 million. KIA's operating expenses are funded from Restricted Funds – administrative loan fees (54%), the General Fund (33%) funds updates to WRIS and planning, and Federal Funds (13%) which includes both Federal loan programs.

The Capital Budget has been submitted requesting state match bond and Disadvantaged Community Drinking Water Grant. The 3 Grants equal around \$39 million with about \$8.8 carry over for FY 2021. State matching funds is 20% for the SRF. The Drinking Water SRF was increased, we are asking for an additional \$800,000 to fund a state match shortfall during 2020 for the additional capitalization grant funding. There was almost an \$11 million increase in funding.

We included leverage bonds, we do not expect to use it, but wanted it in place should the need arise. Our Capital Plan, includes the \$25 million request to increase the lending capacity of Fund B.

ANNOUNCEMENTS/NOTIFICATIONS

Commissioner Dunahoo announced that this was her final Board meeting and thanked the group for the services to the Board and wished everyone well. She said she would be returning back into the private sector to pursue other opportunities.

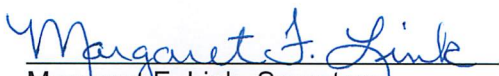
Mr. Bruce Scott also noted that this would be his last Board meeting. He would be leaving EEC as of Monday. He thanked Commissioner Dunahoo and Director McNeil for their service as well as the KIA and DOW staffs.


Mr. Ron Lovan thanked all for their service to the Commonwealth.

- Next scheduled KIA board meeting:
Thursday, January 9, 2020, 1:00 p.m.
100 Airport Road, Third Floor
Frankfort, Kentucky

There being no further business, Mr. Claude Christian moved to adjourn. Mr. Ron Lovan seconded and the motion carried unanimously. The December 5, 2019 meeting of the Board of the Kentucky Infrastructure Authority was adjourned.

Submitted by:


Margaret F. Link, Secretary
Kentucky Infrastructure Authority


Date

A RESOLUTION AND ORDER OF THE BOARD OF DIRECTORS OF THE KENTUCKY INFRASTRUCTURE AUTHORITY AUTHORIZING ISSUANCE OF A CONDITIONAL COMMITMENT FOR A FEDERALLY ASSISTED DRINKING WATER REVOLVING FUND LOAN (F20-013) FOR AN AMOUNT UP TO \$2,399,450 TO THE ESTILL COUNTY WATER DISTRICT, ESTILL COUNTY, KENTUCKY

WHEREAS, the Kentucky Infrastructure Authority (the "Authority") has been duly created as a body corporate and politic constituting a public corporation and a governmental agency of the Commonwealth of Kentucky pursuant to Chapter 224A of the Kentucky Revised Statutes (the "Act"); and

WHEREAS, pursuant to the Act, the Authority is duly and legally authorized to make loans to Governmental Agencies for the purpose of providing funds for the construction and acquisition of sanitary sewer facilities, water facilities or other types of infrastructure, and in that regard, to enter into Assistance Agreements with such Governmental Agencies governing the provisions in respect of which such loans are to be made, the amounts thereof and the repayment provisions in respect thereto; and

WHEREAS, the Authority anticipates entering into an Assistance Agreement for a loan from the Authority's Federally Assisted Drinking Water Revolving Loan Program (Fund F) with the Estill County Water District, subject to final determination of amount when the factors involving such financing have been determined; and

WHEREAS, the Authority will, in the near future, authorize and issue a series of Infrastructure Authority Revenue Bonds for the purpose of funding loans to various governmental agencies, such series of Bonds to be known as Kentucky Infrastructure Authority Revenue Bonds with the appropriate Series designation; and

WHEREAS, the Authority wishes to establish terms and conditions on said Fund F loans prior to the issuance of Authority Revenue Bonds and recognizes that additional planning and design of the financed projects are required.

NOW, THEREFORE, THE KENTUCKY INFRASTRUCTURE AUTHORITY, ACTING BY AND THROUGH ITS BOARD OF DIRECTORS AS ITS DULY AUTHORIZED AND EMPOWERED GOVERNING BODY, DOES HEREBY RESOLVE AND ORDER, AS FOLLOWS:

Section 1. All statements of fact set forth in the preambles to this Resolution and Order are incorporated herein by reference, the same as if set forth verbatim. All such statements of fact are hereby declared to be true and accurate in all material respects.

Section 2. The Authority hereby authorizes the issuance of a conditional Federally Assisted Drinking Water Revolving Fund loan for an amount up to \$2,399,450 of project expense including capitalized interest for the construction period, to the Estill County Water District for the System Improvement and Meter Replacement Project. Such

amounts are subject to adjustment by further action of the Authority or may be adjusted by action of the Executive Director at the time of the issuance of bonds based on adjustment in project costs of not more than (10%) ten percent of the loan amount authorized by this resolution. Upon satisfaction of all conditions of the commitment, execution of an assistance agreement for this loan is authorized.

Section 3. Principal forgiveness of 50% of the assistance amount, not to exceed \$1,000,000 will be credited to the loan balance upon release of liens on all contracts and disbursement of the final draw request by KIA to the borrower. The unforgiven principal balance of \$1,399,450 shall be repaid.

Section 4. The unforgiven principal shall be repayable over 30 years at an interest rate of 0.50%. In addition to debt service, a 0.25% annual administration fee on the unpaid, unforgiven principal balance will be charged. From annual revenues, \$6,000 must be set aside in a borrower held replacement reserve each December 1 until the balance reaches \$120,000 and maintained for the life of the loan. These terms are subject to adjustment upon execution of the loan agreement, upon changes in the project conditions or determination that the project will require authority financing to be done on a taxable basis.

Section 5. This Resolution and Order shall be in full force and effect from and after its adoption at a properly held meeting of the Kentucky Infrastructure Authority this 5th day of December, 2019.

SANDRA K. DUNAHOO, CHAIR
KENTUCKY INFRASTRUCTURE AUTHORITY

ATTEST:

MARGARET F. LINK, SECRETARY
KENTUCKY INFRASTRUCTURE AUTHORITY

REVIEWED BY:

GREG B. LADD, GENERAL COUNSEL
DEPARTMENT FOR LOCAL GOVERNMENT



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

ANTHONY R. HATTON
COMMISSIONER

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

November 20, 2019

Donna McNeil, Executive Director
Kentucky Infrastructure Authority
1024 Capital Center Drive, Suite 340
Frankfort, Kentucky 40601

Re: F20-13 - ECWD#1 Phase 11 Meter Replacements Project
Estill Co Water District--34966
Activity ID: FGL20200003

Dear Mrs. McNeil:

The Division of Water (DOW) hereby certifies that the Estill County Water District #1 (ECWD#1) is eligible to receive \$2,399,450 from the Drinking Water State Revolving Fund. The DOW certifies that the project scope is consistent with the scope that was used to rank the project on the 2020 Intended Use Plan-Project Priority List.

The ECWD#1's status relative to the Drinking Water State Revolving Fund General Conditions is provided below:

1. Project specific environmental information is expected to be submitted to DOW in January 2020.
2. Plans and specifications are expected to be submitted to DOW in January 2020.
3. Construction bids are expected to be opened in May 2020.

Upon compliance with the general conditions, the DOW will issue a final project certification prior to authorizing the loan agreement. A preconstruction and project management conference with the DOW must be held prior to commencement of construction. If you have any questions concerning this letter, please contact William Averell, Project Manager, at (502) 782-6882.

Sincerely,

Peter T. Goodmann, Director
Division of Water

PG/BG: wa

c: Estill County Water District #1 (Audrea Miller)
Bell Engineering (Alan Bowman)



EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND F, FEDERALLY ASSISTED DRINKING WATER REVOLVING LOAN FUND		Reviewer Date KIA Loan Number WRIS Number	Meili Sun December 5, 2019 F20-013 WX21065009	
BORROWER	ESTILL COUNTY WATER DISTRICT #1 ESTILL COUNTY			
BRIEF DESCRIPTION				
This project will implement improvements designed to help reduce unaccounted for water in the system. It will install flow metering and backflow prevention devices, develop a hydraulic model, and relocate or replace 6 substandard existing river crossings.				
The scope of work also includes purchase and installation of new residential meters throughout the service area. The Estill County Water District currently serves approximately 3,800 residential and commercial customers in Estill County.				
PROJECT FINANCING		PROJECT BUDGET		
Fund F Loan	\$2,399,450	Administrative Expenses	\$65,000	
ARC Grant	500,000	Legal Expenses	25,000	
		Land, Easements	10,000	
		Eng - Design / Const	7.4% 5.9% 148,500	
		Eng - Insp	4.3% 4.2% 106,000	
		Eng - Other	20,000	
		Construction	2,300,000	
		Contingency	199,950	
		Other	25,000	
TOTAL	\$2,899,450	TOTAL	\$2,899,450	
REPAYMENT	Rate Term	0.50% 30 Years	Est. Annual Payment 1st Payment 6 Mo. after first draw \$53,791	
PROFESSIONAL SERVICES	Engineer Bond Counsel	Bell Engineering Rubin & Hays		
PROJECT SCHEDULE	Bid Opening Construction Start Construction Stop	Apr-20 May-20 Oct-20		
DEBT PER CUSTOMER	Existing Proposed	\$1,138 \$1,112		
OTHER DEBT	See Attached			
RESIDENTIAL RATES	Current Additional	Users 3,815 0	Avg. Bill \$46.18 (for 4,000 gallons) \$46.18 (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 2016	105,355	273,816	(168,461)	0.4
Audited 2017	95,300	253,314	(158,014)	0.4
Audited 2018	191,584	252,039	(60,455)	0.8
Projected 2019	204,619	204,819	(200)	1.0
Projected 2020	301,599	204,020	97,579	1.5
Projected 2021	278,349	233,513	44,836	1.2
Projected 2022	260,754	212,433	48,321	1.2
Projected 2023	242,807	212,433	30,374	1.1

Reviewer: Meili Sun
Date: December 5, 2019
Loan Number: F20-013

**KENTUCKY INFRASTRUCTURE AUTHORITY
DRINKING WATER STATE REVOLVING FUND (FUND F)
ESTILL COUNTY WATER DISTRICT #1, ESTILL COUNTY
PROJECT REVIEW
WX21065009**

I. PROJECT DESCRIPTION

The Estill County Water District #1 (“ECWD”) is requesting a Fund F loan in the amount of \$2,399,450 for the System Improvement and Meter Replacement project. This project will implement improvements designed to help reduce unaccounted for water in the system. It will install flow metering and backflow prevention devices, develop a hydraulic model, and relocate or replace five substandard existing creek crossings. The ECWD has taken an active approach to minimizing unaccounted for water loss through pump stations and telemetry upgrades, valve replacements, installation of test meter assemblies within the system, utilization of leak detection services, and purchase of a hydraulic model for the system. The scope of work also includes purchase and installation of new residential meters throughout the service area. On site testing indicates that the current meters are rapidly reaching the end of the useful life and inaccurate in measuring low "trickle" flows.

The ECWD is a PSC regulated system serving approximately 3,800 residential and commercial customers in Estill County. All rate changes related to retail and water purchase are subject to PSC approval.

II. PROJECT BUDGET

	<u>Total</u>
Administrative Expenses	\$ 65,000
Legal Expenses	25,000
Land, Easements	10,000
Engineering Fees – Design	106,950
Engineering Fees – Construction	41,550
Engineering Fees – Inspection	106,000
Engineering Fees – Other	20,000
Construction	2,300,000
Contingency	199,950
Other	25,000
Total	<u>\$ 2,899,450</u>

III. PROJECT FUNDING

	Amount	%
KIA Fund F Loan	\$ 2,399,450	83%
ARC Grant	500,000	17%
Total	\$ 2,899,450	100%

IV. KIA DEBT SERVICE

Construction Loan	\$ 2,399,450
Principal Forgiveness	1,000,000
Amortized Loan Amount	\$ 1,399,450
Interest Rate	0.50%
Loan Term (Year)	30
Estimated Annual Debt Service	\$ 50,293
Administrative Fee (0.25%)	3,499
Annual Debt Service	\$ 53,791

V. PROJECT SCHEDULE

Bid Opening	April 2020
Construction Start	May 2020
Construction Stop	October 2020

VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

A) Customers

Customers	Current
Residential	3,600
Commercial	215
Total	3,815

B) Rates

	Current	Prior	Prior	Prior
Date of Last Rate Increase	08/22/19	08/20/18	11/07/17	09/18/17
Minimum 2,000 Gallons	\$21.58	\$21.58	\$21.18	\$18.98
Next 3,000 Gallons	10.53	10.53	10.33	9.26
Next 5,000 Gallons	10.31	10.31	10.11	9.06
Water Loss Control Program Surcharge	3.54			
Cost for 4,000 gallons	\$46.18	\$42.64	\$41.84	\$37.50
Increase %	8.3%	1.9%	11.6%	
Affordability Index (Rate/MHI)	1.8%	1.7%	1.7%	1.5%

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2013-2017, the Utility's service area population was 9,378 with a Median Household Income (MHI) of \$30,080. The median household income for the Commonwealth is \$46,535. The ECWD's disadvantaged community status will qualify the project for a 30 year term at 0.5% interest rate and \$1,000,000 in principal forgiveness.

Year	Population		County Unemployment	
	County	% Change	Date	Rate
1980	14,495		June 2005	6.7%
1990	14,614	0.8%	June 2010	12.7%
2000	15,307	4.7%	June 2015	6.1%
2010	14,672	-4.1%	June 2019	5.6%
Current	14,382	-2.0%		
Cumulative %		-0.8%		

VIII. 2019 CAPITALIZATION GRANT EQUIVALENCIES

Additional Subsidization – This project qualifies for additional subsidization. Principal forgiveness of 50% of the assistance amount, not to exceed \$1,000,000 will be credited to the loan balance upon release of liens on all contracts and disbursement of the final draw request by KIA to the borrower.

IX. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended December 31, 2016 through December 31, 2018. ECWD omitted to report GASB 68 - Accounting and Financial Reporting for Pensions and GASB 75 - Other Postemployment Benefit in 2016 and 2017. The non-cash impact of pension and OPEB liabilities had been removed from 2018 operating expenses. Percentage references in the History section below were based on whole dollar amounts and not the rounded amounts presented.

HISTORY

Total revenues went up 20.3% from \$1.57 million in 2016 to \$1.89 million in 2018 due to the surcharges collected for water loss control program while operating expenses increased 16.0% from \$1.47 million to \$1.70 million during the same period. A total of \$74,200 non-recurring expenses associated with past-due audit fees, legal fees for PSC approval of water loss surcharge, and unplanned maintenance and repair work had been removed from the projections in order to more objectively present ECWD's financial position. The debt service, replacement, and depreciation reserve accounts were underfunded by \$310,000 as of October 31, 2019. The debt coverage ratio was 0.4, 0.4, and 0.8 for 2016, 2017, and 2018 respectively.

The balance sheet reflected a current ratio of 1.2, debt to equity ratio of 1.8, 42.4 days sales in accounts receivable, and 0.7 months of operating expenses in unrestricted cash.

PROJECTIONS

Projections are based on the following assumptions:

- 1) The monthly water loss surcharge will be discontinued once the goal of the water loss control program is achieved with the help of this loan. However, the revenue decrease will be offset by the savings of water purchase cost.
- 2) ECWD will set aside \$45,000 annually for 7 years to replenish the underfunded reserve accounts, subject to KIA annual administrative compliance monitoring.
- 3) Expenses will increase 2% each year for inflation.
- 4) Debt service coverage is 1.2 in 2022 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 F loan.

REPLACEMENT RESERVE

The replacement reserve will be 5% (\$120,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$6,000 yearly) each December 1 for 20 years and maintained for the life of the loan.

X. DEBT OBLIGATIONS

	Outstanding	Maturity
Citizens Guaranty Promissory Note	\$ 241,440	2029
RD Bonds 2018 Issue	4,100,693	2058
Total	\$ 4,342,133	

XI. CONTACTS

Legal Applicant	
Name	Estill County Water District #1
Address	76 Cedar Grove Road Irvine, KY 40336
County	Estill
Authorized Official	Blain Click
Phone	(606) 723-3795

Project Contact - Applicant	
Name	Audrea Miller
Representing	Estill County Water District #1
Address	76 Cedar Grove Road Irvine, KY 40336
Phone	(606) 723-3795
Email	a.miller@estillcountywater.com

Project Administrator	
Name	Karyn Leverenz
Organization	Bluegrass Area Development District
Address	699 Perimeter Drive Lexington, KY 40517
Phone	(859) 269-8021
Email	kleverenz@bgadd.org

Consulting Engineer	
Name	Robert Alan Bowman
Firm	Bell Engineering
Address	2480 Fortune Drive Stanford, KY 40484
Phone	(606) 365-2534
Email	abowman@hkbell.com

XII. RECOMMENDATIONS

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

**ESTILL COUNTY WATER DISTRICT #1
FINANCIAL SUMMARY (DECEMBER YEAR END)**

	<u>Audited</u> <u>2016</u>	<u>Audited</u> <u>2017</u>	<u>Audited</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>	<u>Projected</u> <u>2023</u>
Balance Sheet								
Assets								
Current Assets	269,775	283,468	354,109	354,082	386,798	395,765	405,429	411,504
Other Assets	8,993,620	8,554,723	8,309,017	7,773,279	10,399,578	10,017,747	9,638,704	9,245,303
Total	9,263,395	8,838,191	8,663,126	8,127,361	10,786,376	10,413,512	10,044,133	9,656,807
Liabilities & Equity								
Current Liabilities	386,966	333,895	306,418	312,085	368,058	331,282	336,963	342,903
Long Term Liabilities	4,178,791	4,204,188	5,292,537	5,051,701	6,297,148	6,183,920	6,069,112	5,952,464
Total Liabilities	4,565,757	4,538,083	5,598,955	5,363,786	6,665,206	6,515,203	6,406,075	6,295,367
Net Assets	4,697,638	4,300,108	3,064,171	2,763,575	4,121,170	3,898,309	3,638,057	3,361,440
Cash Flow								
Revenues	1,572,899	1,611,195	1,892,791	1,894,661	2,008,553	2,008,553	2,008,553	2,008,553
Operating Expenses	1,466,506	1,514,590	1,701,479	1,690,314	1,707,226	1,730,476	1,748,071	1,766,018
Other Income	(1,038)	(1,305)	272	272	272	272	272	272
Cash Flow Before Debt Service	105,355	95,300	191,584	204,619	301,599	278,349	260,754	242,807
Debt Service								
Existing Debt Service	273,816	253,314	252,039	204,819	204,020	206,618	158,642	158,642
Proposed KIA Loan	0	0	0	0	0	26,896	53,791	53,791
Total Debt Service	273,816	253,314	252,039	204,819	204,020	233,513	212,433	212,433
Cash Flow After Debt Service	(168,461)	(158,014)	(60,455)	(200)	97,579	44,836	48,321	30,374
Ratios								
Current Ratio	0.7	0.8	1.2	1.1	1.1	1.2	1.2	1.2
Debt to Equity	1.0	1.1	1.8	1.9	1.6	1.7	1.8	1.9
Days Sales in Accounts Receivable	45.6	47.9	42.4	42.3	42.3	42.3	42.3	42.3
Months Operating Expenses in Unrestricted Cash	0.0	0.0	0.7	0.8	0.9	1.0	1.0	1.1
Debt Coverage Ratio	0.4	0.4	0.8	1.0	1.5	1.2	1.2	1.1



Drinking Water Project Profile

Legal Applicant: **Estill County Water District #1**
 Project Title: **ECWD - Phase 11 - System Improvements & Meter Purchase and Replacement Project**
 Project Number: **WX21065009** [View Map](#) Submitted By: **BGADD**
 Funding Status: **Partially Funded** Primary County: **Estill**
 Project Status: **Approved** Planning Unit: **Unit 1**
 Project Schedule: **0-2 Years** Multi-County: **No**
 E-Clearinghouse SAI: **KY201910021221** ECH Status: **Approved**
 Applicant Entity Type: **Water District (KRS 74)** ADD WMC Contact: **Karyn Leverenz**
 Date Approved (AWMPC): **10-19-2018**

Project Description:

THIS PROJECT HAS BEEN AMENDED TO INCLUDE WHAT WAS PREVIOUSLY WX21065006.

The project will involve implementing improvements designed to help reduce unaccounted for water in the system. Work will include to the installation of flow metering devices and backflow prevention devices, development of a hydraulic model, relocation/replacement of six (6) substandard existing river crossings.

This project will also purchase and install new residential meters throughout the service area. The ECWD currently services approximately 4000 residential and commercial customers in Estill County.

Need for Project:

Briefly describe how this project promotes public health or achieves and/or maintains compliance with the Clean Water Act or Safe Drinking Water Act:

The project will involve implementing improvements designed to help reduce unaccounted for water in the system. Work will include but not be limited to the installation of flow metering devices and backflow prevention devices, development of a hydraulic model, relocation/replacement of six (6) substandard existing river crossings, and replace approximately 20% of the existing residential meters.

Additionally, the project is being developed as a portion of a concerted effort by the ECWD to reduce its overall unaccounted for water loss. On site testing indicates that current meters are rapidly approaching the end of their useful life and are inaccurate in measuring low "trickle" flows. To date the ECWD has taken an active approach to minimizing unaccounted for water loss to include but not limited to upgrading pump stations, telemetry upgrades, valve replacements, installation of test meter assemblies throughout the system, utilization of leak detection services and purchasing a hydraulic model of the system.

Project Alternatives:

Alternate A:

Replacement of a small portion of the system thought to be a source of loss. This option has been considered, however; the District feels it needs to put in place flow monitoring devices so that the system can be evaluated as a whole and the specific problematic areas identified for repair or replacement.

Repair faulty meters. This option is not viable due to the fact that often times repairs exceed the cost of replacement and often times said meters have to be shipped off for repair forcing the ECWD to

Alternate B:

Establish additional sources of supply to include other interconnects and/or a treatment facility. Given the problems associated with the existing system, the District feels it is in their best interest and the best interest of the residents of Estill County, to repair and/or replace what is already in use. In order to identify the problematic areas and focus efforts and resources, the District feels that monitoring devices and a comprehensive hydraulic model are needed.

Legal Applicant:

Entity Type: **Water District (KRS 74)** PSC Group ID: **21500**

Entity Name: **Estill County Water District #1**

Web URL: <http://www.estillcountywater.com/>

Office EMail: info@estillcountywater.com

Office Phone: **606-723-3795** Toll Free: Fax:

Mail Address Line 1: **76 Cedar Grove Rd** Phys Address Line 1:

Mail Address Line 2: Phys Address Line 2:

Mail City, State Zip: **Irvine, KY 40336** Phys City, State Zip:

Contact: **Audrea Miller** Financial Contact: Auth Official: **Blain Click**

Contact Title: **General Manager** Financial Contact Title: Auth Official Title: **Chair**

Contact EMail: a.miller@estillcountywater.com Financial Contact EMail: Auth Official EMail:

Contact Phone: **606-723-3795** Financial Contact Phone: Auth Official Phone: **606-723-3795**

Data Source: **Kentucky Infrastructure Authority**

Date Last Modified: 05.06.2020



Drinking Water Project Profile

WX21065009 - Estill County Water District #1

ECWD - Phase 11 - System Improvements & Meter Purchase and Replacement Project

Project Administrator (PA) Information

Name: **Karyn Leverenz**

Title: **Infrastructure Development Coordinator**

Organization: **Bluegrass Area Development District**

Address Line 1: **699 Perimeter Dr**

Address Line 2:

City: **Lexington** State: **KY** Zip: **40517**

Phone: **859-269-8021** Fax: **859-269-7917**

Applicant Contact (AC) Information

Name: **Audrea Miller**

Title: **Office Manager**

Organization: **Estill County Water District #1**

Address Line 1: **76 Cedar Grove Rd**

Address Line 2:

City: **Irvine** State: **KY** Zip: **40336**

Phone: **606-723-3795** Fax: **606-726-9063**

Project Engineer (PE) Information:

This project requires a licensed Professional Engineer.

A Professional Engineer has been procured for this project.

Project Engineer Information:

License No: **PE 24245**

PE Name: **Robert Alan Bowman**

Phone: **606-365-2534** Fax: **859-278-2911**

E-Mail: **abowman@hkbell.com**

Firm Name: **Bell Engineering**

Addr Line 1: **Bell Engineering**

Addr Line 2: **2480 Fortune Drive**

Addr Line 3: **Ste 350**

City: **Stanford** State: **KY** Zip: **40484**

Status: **Current** Disciplinary Actions: **NO**

Issued: **06-09-2005** Expires: **06-30-2021**

Engineering Firm Information:

Permit No: **152**

Firm Name: **Bell Engineering**

Phone: **859-278-5412** Fax: **859-278-2911**

Web URL: **http://www.hkbell.com/**

E-Mail: **jroberts@hkbell.com**

Addr Line 1: **2480 Fortune Drive, Ste. 350**

Addr Line 2:

City: **Lexington** State: **KY** Zip: **40509**

Status: **Current** Disciplinary Actions: **NO**

Issued: **03-29-1993** Expires: **12-31-2020**

Estimated Budget

Project Cost Categories:

Cost Category	Cost
Administrative Expenses:	\$ 65,000
Legal Expenses:	\$ 25,000
Land, Appraisals, Easements:	\$ 10,000
Relocation Expenses & Repayments:	
Planning:	
Engineering Fees - Design:	\$ 106,950
Engineering Fees - Construction:	\$ 41,550
Engineering Fees - Inspection:	\$ 106,000
Engineering Fees - Other:	\$ 20,000
Construction:	\$ 2,300,000
Equipment:	
Miscellaneous:	\$ 25,000
Contingencies:	\$ 199,950
Total Project Cost:	\$ 2,899,450

Construction Cost Categories:

Cost Category	Cost
Treatment:	
Transmission & Distribution:	\$ 2,300,000
Source:	
Storage:	
Purchase of Systems:	
Restructuring:	
Land Acquisition:	
Non-Categorized:	
Total Construction Cost:	\$ 2,300,000

Total Sustainable Infrastructure Costs:

Note: Total Sustainability Infrastructure Costs are included within construction and other costs reported in this section. This breakout is provided for SRF review purposes.



Drinking Water Project Profile

WX21065009 - Estill County Water District #1

ECWD - Phase 11 - System Improvements & Meter Purchase and Replacement Project

Project Funding Sources:

Total Project Cost: **\$2,899,450**

Total Committed Funding: **\$2,399,450**

Funding Gap: **\$500,000 (Partially Funded)**

This project will be requesting SRF funding for fiscal year 2021.

Estimated Project Schedule:

Est. Environmental Review Submittal Date: **11-26-2019**

Estimated Bid Date: **04-23-2020**

Estimated Construction Start Date: **05-27-2020**

Estimated Construction Completion Date: **10-29-2020**

Funding Source	Loan or Grant ID	Fiscal Year	Amount	Status	Applicable Date
KIA SRF Fund F Loan (DW)	F20-013	2020	\$2,399,450	Committed	12/5/2019
ARC			\$500,000	Anticipated	
USDA RD Loan			\$1,432,088	Anticipated	
USDA RD Grant			\$467,362	Anticipated	
Total Committed			\$2,399,450		

Funding Source Notes:

Project merged with F20-032. New budget total is \$2,899,450 including \$1,580,000 from WX21065009 and ARC grant \$500,000. No longer anticipating RD funding.

The following systems are beneficiaries of this project:

KY0330123 Estill County Water District #1

Note: Check mark indicates primary system for this project.

Project Ranking by AWMPC:

Regional Ranking(s):

Planning Unit Ranking:

Total Points:

- Plans and specs have been sent to DOW.
- Plans and specs have been reviewed by DOW.
- Plans and specs have been sent to PSC.
- Plans and specs have been reviewed by PSC.

Economic, Demographic and Geographic Impacts

Economic Impacts	
Jobs Created:	
Jobs Retained:	

*Demographic Impacts (GIS Census Overlay)			
Serviceable Demographic	Project Area	Included Systems	Included Utilities
Population:		9,378	9,378
Households:		4,255	4,255
MHI:		\$30,182	*\$30,182
MHI MOE		\$8,167	*\$8,167
MOE as Pct:		27.0%	27.0%
**NSRL:		2	2

Population and household counts are based on 2010 census block values from the SF1 (100%) dataset.

MHI Source is from the American Community Survey 2014-2018 5Yr Estimates (Table B19013) *(for the primary system operated by the above listed beneficiary utilities).

MHI MOE = Med HH Income Margin of Error.

** NSRL (Non-Standard Rate Levels):

- 0 = Income above Kentucky MHI (KMHI).
- 1 = Income between 80% KMHI and KMHI.
- 2 = Income less than or equal to 80% KMHI.
- KMHI = \$48,392
- 80% KMHI = \$38,714

Geographic Impacts For Project Area	
Counties	
Estill	
Legislative Districts	
District Name	Legislator
House 091	Cluster Howard
Senate 21	Albert Robinson
Congressional 6	Andy Barr
Groundwater Sensitivity Zones	
HUC 10 Watersheds	
HUC Code	Watershed Name
0510020403	Lower Red River
0510020404	Station Camp Creek
0510020405	Millers Creek-Kentucky River

Geographic Impacts For Included System(s)	
Counties	
Estill	
Jackson	
Lee	
Madison	
Powell	
Legislative Districts	
District Name	Legislator
House 074	David Hale
House 089	Robert Goforth
House 091	Cluster Howard
Senate 21	Albert Robinson
Senate 25	Robert Stivers II
Congressional 5	Hal Rogers
Congressional 6	Andy Barr



Drinking Water Project Profile

WX21065009 - Estill County Water District #1

ECWD - Phase 11 - System Improvements & Meter Purchase and Replacement Project

New Customers	
New Residential Customers:	
New Commercial Customers:	
New Institutional Customers:	
New Industrial Customers:	

New or Improved Service		
Service Demographic	Survey Based	Census Overlay*
To Unserved Households:		
To Underserved Households:	4,000	
To Total Households:	4,000	
** Cost Per Household:	\$725	

* GIS Census block overlay figures are estimates of population and households potentially served by systems and projects based on a proximity analysis of relevant service lines to census block boundaries.

** Cost per household is based on surveyed household counts, not GIS overlay values.



Drinking Water Project Profile

WX21065009 - Estill County Water District #1

ECWD - Phase 11 - System Improvements & Meter Purchase and Replacement Project

DW Specific Impacts:

- This project relates to a public health emergency.
- This project will assist a non-compliant system to achieve compliance.
- This project will assist a compliant system to meet future requirements
- This project will provide assistance not compliance related.
- This project is necessary to achieve full or partial compliance with a court order, agreed order, or a judicial or administrative consent decree.
- Primary system has not received any SDWA Notices of Violation within the previous state fiscal year-July through June, i.e. July 2014 – June 2015).

Project Inventory (Mapped Features):

Mapped Point Features							
DOW Permit ID	Count	FeatureType	Purpose	Status	Existing Capacity	Proposed Capacity	Units
KY0330123	1	RADIO METER	WATER EFF - UNMETERED AREA	REHAB			EA
KY0330123	1	TRADITIONAL METER	WATER EFF - TRADITIONAL METERS	NEW			EA

Mapped Line Features							
DOW Permit ID	Line Type	Purpose	Activity	Size (in.)	Material	Length (LF)	
KY0330123	WATER LINE: FINISHED	DISTRIBUTION	REHAB - REPLACE PROBLEM LINES	3.00	PVC	455	
KY0330123	WATER LINE: FINISHED	DISTRIBUTION	REHAB - REPLACE PROBLEM LINES	4.00	PVC	356	
KY0330123	WATER LINE: FINISHED	DISTRIBUTION	REHAB - REPLACE PROBLEM LINES	6.00	PVC	110	
					Total Length	921	

Administrative Components:

- Planning
 Design
 Construction
 Management

Regionalization Components:

Public Water Systems Eliminated:

- this project includes the elimination of public water system(s) through merger or acquisition.

Water Treatment Plants Eliminated:

- This project includes the elimination of water treatment plant(s) through interconnect(s).

Supplementation of Raw Water Supply:

- This project includes supplementing the existing raw water supply.

Supplementation of Potable Water Supply:

- This project includes supplementing the existing potable water supply.

Emergency Only Water Supply:

- This project provides emergency only water supply.



Water Source Protection:

- This project includes land acquisition for water source protection.
-

Water Treatment Components:

- This project includes water treatment components

Treatment Activities:

- This project includes a new water treatment plant.
- This project includes an expansion of an existing water treatment plant.
- This project includes rehabilitation of an existing water treatment plant.
- This project includes upgrades to an existing water treatment plant.
- This project includes emergency power generators for treatment activities.
- This project includes redundant treatment processes.

Acute Public Health Risk:

- This project includes infrastructure options to meet Cryptosporidium removal/inactivation requirements.
- This project includes infrastructure options to meet CT inactivation requirements.

Chronic Public Health Risk:

- This project includes treatment modifications to meet the Disinfectants/Disinfection Byproducts Rule at the water treatment plant.
- This project will provide treatment modifications for VOCs, IOCs, SOC, or Radionuclides.

Secondary Contaminants:

- This project includes treatment modifications to address Secondary Contaminants.

Security:

- This project includes security components for water treatment facilities.

Water Distribution and Storage:

- This project includes water distribution and/or storage components.

Water Line Extensions:

- This project includes water line extension(s).

Redundancy Components:

- This project includes emergency power generators for distribution and/or storage activities.

Number of units provided: **0**

- This project includes redundant distribution and/or storage processes.



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ECWD - Phase 11 - System Improvements & Meter Purchase and Replacement Project

Finished Water Quality:

- This project includes infrastructure to address inadequate water turnover and disinfection byproducts (DBPs).
- This project includes infrastructure to address inability to maintain disinfection residual.

Water Line Replacement:

- This project replaces problem water lines (breaks, leaks, or restrictive flows due to age), water lines consisting of lead and/or asbestos-cement (AC), and/or inadequately sized water lines.

Total length of line replacement: **921**

Water Storage and Pressure Components:

- This project includes the construction of new water tank(s).
- This project includes the replacement of existing water tank(s).
- This project includes the rehabilitation of existing water tank(s).

Number of rehabilitated tanks: **0**

- This project includes the construction of new pump station(s).

Number of new pump stations: **0**

- This project includes the rehabilitation of existing pump station(s).

Number of rehabilitated pump stations: **0**

Security:

- This project includes security components for water distribution infrastructure.

Sustainable Infrastructure - Green Infrastructure:

Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that maintains and restores natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater. On a regional scale, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains, and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale, green infrastructure consists of site and neighborhood-specific practices, such as:

Component

Cost

- Bioretention
- Trees
- Green Roofs
- Permeable Pavement
- Cisterns

Total Green Infrastructure Cost: \$0

There are no Green Infrastructure components specified for this project.



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Sustainable Infrastructure - Water Efficiency:

The use of improved technologies and practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future. Examples include:

Component	Cost
<input type="checkbox"/> Installing or retrofitting water efficient devices such as plumbing fixtures and appliances (toilets, showerheads, urinals).	
<input type="checkbox"/> Installing any type of water meter in previously unmetred areas (can include backflow prevention if in conjunction with meter replacement).	
<input checked="" type="checkbox"/> Replacing existing broken/malfunctioning water meters with AMR or smart meters, meters with leak detection, backflow prevention.	\$270,000
<input type="checkbox"/> Retrofitting/adding AMR capabilities or leak equipment to existing meters.	
<input checked="" type="checkbox"/> Conducting water utility audits, leak detection studies, and water use efficiency baseline studies, which are reasonably expected to result in a capital project or in a reduction in demand to alleviate the need for additional capital investment.	\$25,000
<input type="checkbox"/> Developing conservation plans/programs reasonable expected to result in a water conserving capital project or in a reduction in demand to alleviate the need for capital investment.	
<input type="checkbox"/> Recycling and water reuse projects that replace potable sources with non-potable sources (Gray water, condensate, and wastewater effluent reuse systems, extra treatment or distribution costs associated with water reuse).	
<input type="checkbox"/> Retrofit or replacement of existing landscape irrigation systems to more efficient landscape irrigation systems.	
<input type="checkbox"/> Water meter replacement with traditional water meters.*	
<input type="checkbox"/> Distribution pipe replacement or rehabilitation to reduce water loss and prevent water main breaks.*	
<input type="checkbox"/> Storage tank replacement/rehabilitation to reduce water loss.*	
<input type="checkbox"/> New water efficient landscape irrigation system, where there currently is not one.*	
Total Water Efficiency Cost:	\$295,000

** Indicates a business case may be required for this item.*

Water Meter Replacement - Replace approximately 20% of residential meters (500 each) to a meter that will record low flows.

Distribution Pipe Replacement - Relocate six (6) sub standard river crossing to mitigate potential future line failures. Install flow monitoring devices at all tank sites and throughout the system to help quantify system flows and identify areas that are problematic.

Hydraulic Model - Hire professional services to develop and manage a comprehensive hydraulic model.



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Sustainable Infrastructure - Energy Efficiency:

Energy efficiency is the use of improved technologies and practices to reduce the energy consumption of water projects, use energy in a more efficient way, and/or produce/utilize renewable energy. Examples include:

Component	Cost
<input type="checkbox"/> Renewable energy projects, which are part of a public health project, such as wind, solar, geothermal, and micro-hydroelectric that provides power to a utility.	
<input type="checkbox"/> Utility-owned or publicly-owned renewable energy projects.	
<input type="checkbox"/> Utility energy management planning, including energy assessments, energy audits, optimization studies, and sub-metering of individual processes to determine high energy use areas.	
<input type="checkbox"/> Energy efficient retrofits, upgrades, or new pumping systems and treatment processes (including variable frequency drives (VFDs)).*	
<input type="checkbox"/> Pump refurbishment to optimize pump efficiency.*	
<input type="checkbox"/> Projects that result from an energy efficient related assessment.*	
<input type="checkbox"/> Projects that cost effectively eliminate pumps or pumping stations.*	
<input type="checkbox"/> Projects that achieve the remaining increments of energy efficiency in a system that is already very efficient.*	
<input type="checkbox"/> Upgrade of lighting to energy efficient sources.*	
<input type="checkbox"/> Automated and remote control systems (SCADA) that achieve substantial energy savings.*	
Total Energy Efficiency Cost:	\$0

* Indicates a business case may be required for this item.

There are no Energy Efficiency components specified for this project.

Sustainable Infrastructure - Environmentally Innovative:

Environmentally innovative projects include those that demonstrate new and/or innovative approaches to delivering services or managing water resources in a more sustainable way. Examples include:

Component	Cost
<input type="checkbox"/> Total integrated water resources management planning, or other planning framework where project life cycle costs are minimized, which enables communities to adopt more efficient and cost-effective infrastructure solutions.	
<input type="checkbox"/> Plans to improve water quantity and quality associated with water system technical, financial, and managerial capacity.	
<input type="checkbox"/> Source water protection planning (delineation, monitoring, modeling).	
<input type="checkbox"/> Planning activities to prepare for adaptation to the long-term effects of climate change and/or extreme weather.	
<input type="checkbox"/> Utility sustainability plan consistent with EPA's sustainability policy.	
<input type="checkbox"/> Greenhouse gas inventory or mitigation plan and submission of a GHG inventory to a registry as long as it is being done for an SRF eligible facility.	
<input type="checkbox"/> Construction of US Building Council LEED certified buildings, or renovation of an existing building.	
<input type="checkbox"/> Projects that significantly reduce or eliminate the use of chemicals in water treatment.*	
<input type="checkbox"/> Treatment technologies or approaches that significantly reduce the volume of residuals, minimize the generation of residuals, or lower the amount of chemicals in the residuals.*	
<input checked="" type="checkbox"/> Trenchless or low impact construction technology.*	\$10,000
<input type="checkbox"/> Using recycled materials or re-using materials on-site.*	
<input type="checkbox"/> Educational activities and demonstration projects for water or energy efficiency (such as rain gardens).*	
<input type="checkbox"/> Projects that achieve the goals/objectives of utility asset management plans.*	
Total Environmentally Innovative Cost:	\$10,000

* Indicates a business case may be required for this item.

This project will involve some direction drill or traditional bore and encasement.



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Sustainable Infrastructure - Asset Management:

If a category is selected, the applicant must provide proof to substantiate claims. The documents must be submitted to Anshu Singh (Anshu.Singh@ky.gov) for CW projects

Component

Last Rate Adjustment Date: **11-17-2019** [Download Fee Schedule](#)

Rate Adjustment Age: **2 months**

System's monthly water bill, based on 4,000 gallons, as a percentage of MHI: **1.70%**

- The system(s) has a Capital Improvement Plan or similar planning document.
- The system(s) involved in this project have specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure.

Project Status: Approved

Date Approved: 10-19-2018

Date Revised:
